CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, March 8, 1906.

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CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

The following Plans (P.), Specifications (S.), and Bidding Sheets (B. S.) may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

Bids close.	Work.	Place.	On file.	See issue.
Mar.				
*9	Cement	Nampa, Idaho	S.	2- 8
*10	Two snagboats	Vicksburg, Miss.	P. & S.	1-11
10	Light & water plant	Wynnewood, Ind. T.	P. & S.	2-22
*10	Bridge	Pedricktown, N. J.	P. & S.	2-22
*12	Lock	Rock Island, Ill.	P. S. & B. S.	2-22
12	Railway	Transcontinental Ry.	S.	2-22
*13	Powder tanks	Wash., D. C.	S. & B. S.	2- 8
*15	Canal	Oregon	P. & S.	2- 8
15	Vit. pipe sewers	Woodstock, Vt.	S. & B. S.	3- 1
*16	Cement	Los Angeles, Cal.	S. & B. S.	2-15
16	Breakwater	Cleveland, O.	S.	3- 8
*17	Pump house, etc.	Wash., D. C.	S.	2-22
*19	Sand filters	Springfield, Mass.	P. & S.	3- 1
*22	Crematory, etc.	Oswego, N. Y.	P. S. & B. S.	3- 1
24	Turbo alternators	New York	S.	3- 1
*30	Bridge	Port Huron, Mich.	P. & S.	2-15
*30	Lock gates	Pittsburg, Pa.	S. & B. S.	3- 1
31	Power house	New Orleans, La.	S.	3- 8
31	Timber wharf	Bremerton, Wash.	S.	3- 1
31	Power plant	New York	S.	3- 1
31	Quay wall	Bremerton, Wash.	S.	2-15
Apr.				
*1	Garbage disposal	Auburn, N.Y.	S.	2-22
*2	Port works	Chile	P. & S.	5- 4
5	Wharves	Manila, P. I.	P. & S.	12-14
7	R. R. track scale	Portsmuth, N.H.	S.	3- 8
*9	Wharf	Guantanamo, Cuba	P. & S.	2-22
12	Cement	Glendive, Mont.	S.	3- 8
16	Light & power plant	New York	P. S. & B. S.	2-22
May				
4	Wharf sheds & Rys.	Manila, P. I.	P. & S.	3- 1
—	Steel, etc.	Glendive, Mont.	P. & S.	2- 8

*Work advertised in Engineering News.

NOTE.—We are desirous of securing specifications and bidding sheets (and plans when not too bulky) of pending work for file in our New York office for the benefit of contractors or others who may be interested in the work. If more sets than one are sent us we shall be pleased to distribute these to contractors who ask for them. When the work is advertised in Engineering News a note that the plans are filed with us will be added to the advertisement without cost.

LIST OF CONTRACTS PENDING.

Bids close.	Work.	Place.	On file.	See issue.
	LIGHT, HEAT AND POWER PLANTS.			
Mar. 10	Electric light & water plant	Wynnewood, Ind. T.		Feb. 22
Mar. 14	Electric lighting	New York, N. Y.		Mar. 8
Mar. 15	Electric light plant	Bamberg, S. C.		Mar. 1
Mar. 17	Power house	West Point, N. Y.		Mar. 8
Mar. 18	Light & power plant	Warrensville, O.		Mar. 8
Mar. 20	Steam purifiers	Chicago, Ill.		Mar. 8
Mar. 24	Power plant	New York, N. Y.		Mar. 8
Mar. 31	Power house	New Orleans, La.		Mar. 8
Apr. 4	Transmission line poles	Chicago, Ill.		Feb. 8
	Advertised, Eng. News, Feb. 8.			
Apr. 9	Light & power plant	Fullerton, Cal.		Mar. 1
Apr. 16	Light & power plant	New York, N. Y.		Feb. 22
No date	Gas pipe line	Cincinnati, O.		Feb. 15
	BRIDGES.			
Mar. 8	Bridges	Columbus, Neb.		Mar. 1
Mar. 9	Viaduct	Milwaukee, Wis.		Mar. 8
Mar. 10	Bridge	Pedricktown, N. J.		Feb. 22
	Advertised, Eng. News, Feb. 22 and Mar. 1.			
Mar. 12	Bridge	Ottawa, Ont.		Feb. 22
Mar. 12	Bridge	Newport, Ind.		Feb. 22
	Advertised, Eng. News, Feb. 15.			
Mar. 12	Abutment pier	Bay City, Mich.		Mar. 1
Mar. 12	Bridges	Pierce, Neb.		Mar. 1
Mar. 13	Bridges, etc.	Columbia City, Ind.		Mar. 1
Mar. 14	Bridge	Salem, Mass.		Mar. 1
	Advertised, Eng. News, Mar. 1.			
Mar. 14	Bridge	Houston, Tex.		Mar. 8
Mar. 19	Bridge	Henrietta, Tex.		Mar. 8
Mar. 20	Bridges	Madison, Neb.		Mar. 8
Mar. 22	Bridges	Trinidad, Colo.		Mar. 8
Mar. 23	Bridges	Bryan, O.		Mar. 8
Mar. 30	Bridge	Port Huron, Mich.		Feb. 15
	Advertised, Eng. News, Feb. 15 to Mar. 15.			
Mar. 31	Bridge	Custer, S. Dak.		Jan. 25
Apr. 3	Bridge	Colfax, Wash.		Mar. 1
Apr. 4	Bridge	Nevada City, Cal.		Feb. 15
Apr. 6	Bridges	Goldendale, Wash.		Mar. 8
	BUILDINGS.			
Mar. 10	Building	Minneapolis, Minn.		Feb. 22
Mar. 10	Building	St. Paul, Minn.		Mar. 8
Mar. 12	Casino building	Detroit, Mich.		Mar. 8
Mar. 13	Boat houses	Newark, N. J.		Mar. 8
	Advertised, Eng. News, Mar. 8.			
Mar. 13	Library	Indianapolis, Ind.		Feb. 22
Mar. 14	Wiring	Ogden, Utah		Feb. 22
	Advertised, Eng. News, Feb. 22 and Mar. 1.			
Mar. 14	Extension	New York, N. Y.		Mar. 8
Mar. 15	School	Orange, N. J.		Mar. 8
Mar. 15	Court-house	Ashland, Ala.		Mar. 8
Mar. 15	Heating	Ogden, Utah		Feb. 22
	Advertised, Eng. News, Feb. 22 and Mar. 1.			
Mar. 15	Church	Zanesville, O.		Feb. 1
Mar. 15	School	Cooperstown, N. Y.		Mar. 1
Mar. 15	Building, heating	Lawrence, Kan.		Mar. 1
Mar. 19	Additions, schools	New York, N. Y.		Mar. 8
Mar. 19	Heating and ventilating app.	New York		Mar. 8
Mar. 20	Theater	Memphis, Tenn.		Mar. 1
Mar. 20	Structural material	New York, N. Y.		Mar. 1
	Advertised, Eng. News, Mar. 1 to 15.			
Mar. 22	Vacuum clean'g sys.	Washington, D. C.		Mar. 8
	Advertised, Eng. News, Mar. 8 and 15.			
Mar. 26	Court-house	Fresno, Cal.		Feb. 15
Mar. 27	School	Madison, Wis.		Mar. 1
Mar. 30	School	Fullerton, Cal.		Feb. 22
Apr. 1	Laundry	Warren, O.		Feb. 22
Apr. 3	Building	Pierre, S. Dak.		Feb. 15
Apr. 3	Jail	Mobile, Ala.		Mar. 8
	WATER SUPPLY AND IRRIGATION.			
Mar. 13	Water system	Norfolk, Va.		Mar. 8
Mar. 14	Water pipe	Perth Amboy, N. J.		Mar. 1
	Advertised, Eng. News, Mar. 1.			
Mar. 14	Concrete conduit	Richmond, Va.		Feb. 22
	Advertised, Eng. News, Feb. 22 and Mar. 1.			
Mar. 15	Water system	New York, N. Y.		Mar. 8
May 15	Water pipe	New Orleans, La.		Mar. 8
	Advertised, Eng. News, Mar. 8.			
Mar. 17	Water-works plant	Arcadia, Fla.		Feb. 22
	Advertised, Eng. News, Feb. 22 to Mar. 15.			
Mar. 17	Pump house, machinery	Wash., D. C.		Feb. 22
	Advertised, Eng. News, Feb. 15 and 22.			
Mar. 19	Sand filters	Springfield, Mass.		Mar. 1
	Advertised, Eng. News, Mar. 1 to 15.			
Mar. 19	Water-works	Glendive, Mont.		Mar. 1
	Advertised, Eng. News, Mar. 1 to 15.			
Mar. 20	Concrete conduit	Dallas, Tex.		Mar. 1
	Advertised, Eng. News, Mar. 1 and 8.			
Mar. 20	Water system	Apalachicola, Fla.		Feb. 22
	Advertised, Eng. News. Feb. 22 and Mar. 1.			
Mar. 20	Pipe, etc.	Edmonton, Alta.		Mar. 8
	Advertised, Eng. News, Mar. 8.			
Mar. 21	Water-works	Donaldsonville, La.		Mar. 1
Mar. 21	Water-works impvts.	Donaldson, Miss.		Mar. 8
Mar. 21	Valves and hydrants	Atlanta, Ga.		Mar. 8
Mar. 21	Water-works	Chickasha, Ind. T.		Mar. 8
Mar. 21	Water system	Marlow, Ind. T.		Mar. 1
	Advertised, Eng. News, Mar. 1 and 8.			
Mar. 23	Laying cast-iron pipe	Cincinnati, O.		Mar. 1
	Advertised, Eng. News, Mar. 1 to 15.			
Mar. 23	Water system	Belle Plain, Ind.		Mar. 1
Mar. 25	Pipe and valves	Boulder, Colo.		Mar. 8
Mar. 26	Pipe, meters, etc.	Winnipeg, Man.		Mar. 8
	Advertised, Eng. News, Mar. 8 and 15.			
Mar. 27	Water-works & sewer sys.	Franklin, Va.		Mar. 1
	Advertised, Eng. News, Mar. 1 to 22.			
	SEWERAGE.			
Mar. 9	Sewerage plant	Libertyville, Ill.		Mar. 8
Mar. 10	Sewers	Des Moines, Ia.		Mar. 8
Mar. 10	Sewer	Norwood, O.		Feb. 22
Mar. 12	Sewer	Glendale, O.		Mar. 8
Mar. 13	Sewers	New York, N. Y.		Mar. 8
Mar. 14	Sewers	New York, N. Y.		Mar. 8
Mar. 14	Sewers	Dayton, O.		Mar. 8
Mar. 14	Improving drain	Roanoke, Va.		Mar. 1
Mar. 15	Sewer system	Mount Carmel, Pa.		Mar. 1
	Advertised, Eng. News, Mar. 1 and 8.			
Mar. 15	Sewer	Woodstock, Vt.		Mar. 1
Mar. 15	Sewers	New York, N. Y.		Mar. 8
Mar. 16	Sewer	Lebanon, O.		Mar. 1
Mar. 19	Sewers	Washington, D. C.		Mar. 1
	Advertised, Eng. News, Mar. 1 and 8.			
Mar. 19	Sewer system	Oklahoma City, Okla.		Mar. 1
Mar. 19	Sewers	Cobleskill, N. Y.		Feb. 22
Mar. 19	Sewerage	Fresno, Cal.		Mar. 8
Mar. 20	Sewers	Apalachicola, Fla.		Feb. 22
	Advertised, Eng. News, Feb. 22 and Mar. 1.			
Mar. 20	Sewerage	Camden, N. J.		Mar. 1
Mar. 25	Sewers	Green Bay, Wis.		Feb. 22
Mar. 27	Sewer system	Franklin, Va.		Mar. 8
Mar. 31	Sewerage	Erie, Pa.		Mar. 8
Apr. 11	Sewers	Georgetown, Ky.		Mar. 8
	Advertised, Eng. News, Mar. 8.			
Apr. 15	Sewers	Pensacola, Fla.		Mar. 8
	Advertised, Eng. News, Mar. 8, 15, 22 and 29.			
May 8	Sewers	New Orleans, La.		Mar. 8
	Advertised, Eng. News, Mar. 8 to May 3.			
	STREETS AND ROADS.			
Mar. 8	Macadam roads	Madison, Ind.		Feb. 22
Mar. 10	Paving materials	Memphis, Tenn.		Mar. 8
Mar. 12	Paving	Canton, O.		Mar. 8
Mar. 13	Asphalt paving	Crookston, Minn.		Feb. 8
Mar. 13	Grading	New York, N. Y.		Mar. 8
Mar. 13	Broken stone, etc.	New York, N. Y.		Mar. 8
Mar. 14	Paving	Dayton, O.		Mar. 8
Mar. 14	Paving	Holland, Mich.		Mar. 8
Mar. 14	Macadam	Superior, Wis.		Mar. 8
Mar. 15	Brick paving	Corning, N. Y.		Feb. 22
	Advertised, Eng. News, Feb. 22 and Mar. 1.			
Mar. 15	Road	Peekskill, N. Y.		Feb. 8
	Advertised, Eng. News, Feb. 8.			
Mar. 16	Paving	Spartanburg, S. C.		Mar. 1
	Advertised, Eng. News, Mar. 1 and 8.			
Mar. 17	Grading and macadamizing	Shelby, Mich.		Mar. 1
Mar. 19	Paving	Cobleskill, N. Y.		Feb. 22
Mar. 19	Grading	Des Moines, Ia.		Mar. 8
Mar. 19	Macadam	Delaware, O.		Mar. 8
Mar. 19	Paving	Menominee, Mich.		Mar. 1
Mar. 20	Paving	Alexandria, La.		Mar. 8
Mar. 20	Paving	Lake Charles, La.		Feb. 22
Mar. 22	Road work	Seattle, Wash.		Mar. 8
Mar. 25	Paving	Grand Rapids, Mich.		Mar. 8
	Advertised, Eng. News, Mar. 8 and 15.			
Mar. 27	Asphalt	Winnipeg, Man.		Mar. 8
	Advertised, Eng. News, Mar. 8 and 15.			
Mar. 28	Paving	El Paso, Tex.		Mar. 8
Apr. 2	Road	Leavenworth, Wash.		Feb. 8
Apr. 2	Asphalt paving	Green Bay, Wis.		Mar. 8
No date	Grading	Baltimore, Md.		Feb. 15
	Advertised, Eng. News, Feb. 15 and 22.			
No date	Sidewalks	Oberlin, Kan.		Feb. 22
	MISCELLANEOUS CONTRACTS.			
Mar. 9	Cement	Nampa, Idaho		Feb. 8
	Advertised, Eng. News, Feb. 8 to Mar. 1.			
Mar. 9	Bulkheads	Baltimore, Md.		Mar. 8
Mar. 10	Electric railway	Baltimore, Md.		Feb. 8
	Advertised, Eng. News, Feb. 8 to Mar. 1.			
Mar. 10	Two snagboats	Vicksburg, Miss.		Jan. 11
	Advertised, Eng. News, Jan. 11-18, Feb. 1-8.			
Mar. 10	Railway construction	Canadian Pac. Ry.		Feb. 22
Mar. 12	Railway	Transcontinental Ry.		Feb. 22
Mar. 12	Steel bars	Glendive, Mont.		Feb. 22
	Advertised, Eng. News, Feb. 15 to Mar. 8.			
Mar. 12	Lock	Rock Island, Ill.		Feb. 22
	Advertised, Eng. News, Feb. 15 to Mar. 8.			
Mar. 13	Powder tanks	Washington, D. C.		Feb. 8
	Advertised, Eng. News, Feb. 8 and 15.			
Mar. 14	Ditches	Cleveland, O.		Feb. 22
Mar. 14	Dredging	Grand Rapids, Mich.		Mar. 1
Mar. 15	Canal	Oregon		Feb. 8
	Advertised, Eng. News, Feb. 8.			
Mar. 15	Rehandling machine	Philadelphia, Pa.		Feb. 15
	Advertised, Eng. News, Feb. 15 to Mar. 8.			
Mar. 15	Railway	Wisconsin Rapid Transit Co.		Feb. 15
Mar. 15	Refuse destructor	Transvaal (Foreign)		Mar. 8
Mar. 15	Dredging	Boston, Mass.		Mar. 8
	Advertised, Eng. News, Mar. 8.			
Mar. 16	Cement	Los Angeles, Cal.		Feb. 15
	Advertised, Eng. News, Feb. 15 to Mar. 8.			
Mar. 16	Breakwater	Cleveland, O.		Mar. 1
Mar. 19	Ditch	Centerville, Ia.		Mar. 8
Mar. 20	Gravity yard	Peoria & Pekin Union Ry.		Mar. 8
	Advertised, Eng. News, Mar. 1.			
Mar. 22	R. R. tunnel	Detroit, Mich.		Mar. 1
Mar. 22	Garbage crematory	Oswego, N. Y.		Feb. 22
	Advertised, Eng. News, Feb. 22 to Mar. 15.			
Mar. 27	Cement	Wheeling, W. Va.		Mar. 1
	Advertised, Eng. News, Mar. 1 to 22.			
Mar. 28	Dredging	New Orleans, La.		Mar. 1
	Advertised, Eng. News, Mar. 1 to 22.			
Mar. 28	Drain	Knoxville, Ia.		Mar. 8
Mar. 30	Spillway	San Francisco, Cal.		Mar. 1
	Advertised, Eng. News, Mar. 1 to 22.			
Mar. 30	Lock gates	Pittsburg, Pa.		Mar. 1
	Advertised, Eng. News, Mar. 1 to 22.			
Mar. 30	Slip	Honolulu, H. I.		Mar. 1
Mar. 31	Timber wharf	Bremerton, Wash.		Mar. 1
Mar. 31	Dredging	New London, Conn.		Mar. 1
	Advertised, Eng. News, Mar. 1 to 22.			
Mar. 31	Ditch, etc.	Lewiston, Idaho		Mar. 1
	Advertised, Eng. News, Mar. 1 to 29.			
Mar. 31	Quay wall	Bremerton, Wash.		Feb. 15
Apr. 1	Garbage disposal	Auburn, N. Y.		Feb. 22
	Advertised, Eng. News, Feb. 22 to Mar. 8.			
Apr. 2	Port works	Chile (Foreign)		May 4
	Advertised, Eng. News, April 1, 1906.			
Apr. 2	Ditch	Muscatine, Ia.		Mar. 8
Apr. 3	Ditch	Spirit Lake, Ia.		Jan. 18
Apr. 4	Dredging	Washington, D. C.		Mar. 8
Apr. 5	Wharves	Manila, P. I.		Dec. 14
Apr. 7	R. R. track scale	Portsmouth, N. H.		Mar. 8
Apr. 9	Wharf	Guantanamo, Cuba		Feb. 22
	Advertised, Eng. News, Feb. 15 and 22.			
Apr. 9	Street signs	Schenectady, N. Y.		Mar. 1
	Advertised, Eng. News, Mar. 1.			
Apr. 12	Cement	Glendive, Mont.		Mar. 8
Apr. 12	Main canal	Glendive, Mont.		Mar. 8
	Advertised, Eng. News, Mar. 8 to 29.			
Apr. 12	Dam	Carlsbad, N. Mex.		Mar. 8
	Advertised, Eng. News, Mar. 8.			
Apr. 16	Main canal	Boise, Idaho		Mar. 8
	Advertised, Eng. News, Mar. 8 to 29.			
May 1	Steel dock	Chile (Foreign)		Nov. 9
May 4	Wharf sheds & Rys.	Manila, P. I.		Mar. 1
No date	Brick, terra cotta	Lowell, Mass.		Mar. 1
	Advertised, Eng. News, Mar. 1.			
No date	Steam shovel excavation	Towanda, Pa.		Feb. 1
No date	Cement	Chicago, Ill.		Feb. 1
No date	Steel, cast-iron, etc.	Glendive, Mont.		Feb. 8
No date	Grading	Baltimore, Md.		Feb. 15
	Advertised, Eng. News, Feb. 15 and 22.			
No date	Concrete hotel	Porto Rico		Feb. 15
	Advertised, Eng. News, Feb. 15.			
	CIVIL SERVICE EXAMINATIONS.			
Mar. 14	Aid	Washington, D. C.		Feb. 8
Mar. 15	Arch. Draftsman	New York, N. Y.		Mar. 1
Mar. 17	Architectural Designer	Albany, N. Y.		Feb. 22
Mar. 17	Asst. Engineer	Albany, N. Y.		Feb. 22
Mar. 17	Auditor, Highway Accts.	Albany, N. Y.		Feb. 22
Mar. 17	Bldg. Inspector	Albany, N. Y.		Feb. 22
Mar. 17	Chief Engineer	Albany, N. Y.		Feb. 22
Mar. 17	Highway Insp.	Albany, N. Y.		Feb. 22
Mar. 21	Topographic Dftsman	Washington, D. C.		Feb. 22
Mar. 21	Arch. Draftsman	New York, N. Y.		Mar. 1
Mar. 21	Surveyor	Philippine Service		Mar. 1
Mar. 21	C. E. Student	Washington, D. C.		Mar. 1
Mar. 21	Scientific Asst.	Washington, D. C.		Mar. 8
Mar. 28	Topographic Dftsman	St. Louis, Mo.		Mar. 8
Apr. 18	Scientific Asst.	Washington, D. C.		Mar. 1

TO ENGINEERS AND CONTRACTORS

ENGINEERING NEWS desires to obtain the **earliest possible reliable information** concerning all projected work. We will appreciate any items that you may send us. Copies containing such information will be mailed to you, upon request.

ADDRESS

Wainwright A. S. Randall, Editor,
The Construction News Department.

RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

CANTON COMPANY.—We are officially advised that surveys are completed for belt line around Canton, Md., to be operated by steam. Right-of-way and capital are secured. Contracts for construction will be let in the near future. Walter B. Brooks is Pres. and Thomas M. Ward is Ch. Engr., both of Baltimore, Md.

DENVER, LARAMIE & NORTHWESTERN.—This company has been incorporated in Wyoming to build a standard-gage line from Denver, Colo., northwestwardly through Denver, Jefferson, Adams, Boulder, Weld and Larimer Counties, Colorado, and Albany, Carbon, Natrona, Fremont and Big Horn Counties, Wyoming, to the northern boundary of that state, 100 miles in Colorado and 350 miles in Wyoming. The following officers were elected at a meeting on Feb. 20: President, Charles S. Johnson, New York; First Vice-President, W. R. West, Minneapolis, Kan.; Second Vice-President, Robert H. Dwyer, Pueblo, Colo.; Third Vice-President, Sidney J. Kent, Lincoln, Neb.; Secretary, Joe T. West, Laramie; Treasurer, J. O. Curry, Boston; General Counsel, John D. Milliken, McPherson, Kan.; General Manager, Robert H. Dwyer.

GULF & NORTHWESTERN.—N. R. Morgan, Atty., Meridian, Tex., Secy. of the G. & N. W. Ry. Co., informs us that location survey of the main line of this railway from Waco, Tex., to Strawn, Tex., is now nearly completed. It is about 125 miles long, passing through Meridian and Stephensville. "The engineers' report will show a splendid profile as no point reaches as much as 1% grade. Commencing at Waco, the head of navigation on the Brazos River, and ending at the coal fields at Strawn, it traverses a thickly settled, well-developed rich, agricultural country."

GREAT NORTHERN OF CANADA.—MULLARKEY & O'BRIEN, of Montreal, Que., have been awarded the contract for building the extension from Garneau Junction to Quebec, 90 miles, and the branch from Montfort Junction to Saint Jerome, 20 miles. A. J. Gorrie is Gen. Supt. at Montreal, Que.

GRAND TRUNK PACIFIC.—Contracts for 457 miles of the main line from Touchwood Hills to Edmonton were awarded on Feb. 22, as follows: From Touchwood Hills to Saskatoon, 140 miles, to the CANADIAN WHITE CO., of Montreal, Que.; from Saskatoon to Edmonton, 317 miles, to FOLEY BROS., LARSON & CO., of Saint Paul, Minn. The last named company has the contract for the branch from Fort William to Lake Superior Junction, 210 miles, and the MACDONALD & McMILLAN CO., of Westbourne, Man., has the contract for the first section of the main line from Portage la Prairie to Touchwood Hills, 275 miles. This makes a total of 942 miles now under contract. GREER BROS., of Port Arthur, Ont., have contract for 700,000 ties. F. W. Morse is Vice-Pres. and Gen. Mgr., and B. B. Kelliher is Ch. Engr., both at Montreal.

ILLINOIS CENTRAL.—The contract for grading 39 miles of line for the Illinois Central Railroad from Haleyville, Ala., westward toward Corinth, Miss., has been let to the ALABAMA CONSTRUCTION CO., of Anniston, Ala., of which D. B. Lacy is Pres.

KNOXVILLE, SEVIERVILLE & NEWPORT.—We are officially advised that permanent survey is now being run. Sevier County voted $50,000 of bonds for this line on Feb. 24. The railroad will be built from Rockford, Tenn., to Sevierville and Newport. S. P. Condon, Knoxville, Tenn., is Pres. G. W. Pearsall is Ch. Engr., at Sevierville.

MISSOURI PACIFIC.—According to an exchange, the following is an official statement of new lines being built in the interest of this system: From Eudora, Ark., southwest to Gilbert, La., 78 miles, to be completed by November, 1906; JOHNSTON & GROMMETT BROS., with office on the work at Eudora, Ark., contractors. Gurdon & Fort Smith Railroad, under construction from Antoine, northwest 34 miles, to a point near Caddo Gap, Ark.; the DALHOFF CONSTRUCTION CO., Little Rock, Ark., contractor. Gurdon & Fort Smith Northern, under construction from a connection with the Gurdon & Fort Smith, near Caddo Gap, northwest to the Ouachita River, 28 miles; the DALHOFF CONSTRUCTION CO. has the contract for 6 miles; to be completed by August next. Springfield & Southwestern Railway, under construction from Crane, Mo., on the White River branch, to Springfield, a distance of 33 miles; to be completed by June 1; WILLIER CONSTRUCTION CO., Springfield, Mo., contractor. Coal Belt Railway, extension from the Coal Belt Railway, a branch of the St. L. I. M. & S., in Section 2, Township 9 S., Range 2 E., northeast to coal mines in Williamson County, Illinois, 2½ miles; under construction; J. A. WARE CONSTRUCTION CO., Saint Louis, Mo., contractor. E. F. Mitchell is Engr. of Construction, at St. Louis, Mo.

MIDLAND & CENTRAL.—An official report from Norfolk, Neb., states that the people of Wheeler County have voted $34,500 in bonds for the Midland & Central Ry., an extension of the Union Pacific into Keya Paha County. The bonds call for three stations in Wheeler County.

NEWTON & NORTHWESTERN.—J. L. Blake, Gen. Mgr., Boone, Ia., informs us that contracts will be let at once for building an extension to Fort Dodge, Ia., about 18 miles long.

OHIO & GULF.—We are officially informed that this company has made complete survey for its line and has secured right-of-way. Capital has not been secured. The railroad is to be 34 miles long and will be built in Tennessee. William Cooper is Pres. and R. J. Moscrip is Ch. Engr., both at Mayland, Tenn.

PEORIA & PEKIN UNION RY.—Curtiss Millard, Pres. of the Peoria & Pekin Union Ry. Co., Peoria, writes us that the board of directors has authorized construction of a gravity yard in East Peoria, containing 23 miles of tracks, involving about 140,000 cu. yds. of excavation and 2,000 cu. yds. of concrete. Bids for the work are asked until March 20, noon. Plans and specifications can be seen at the office of Stanley Millard, Ch. Engr., Room 31, Union Station, Peoria, Ill. (Advertised, Engineering News.)

SEABOARD AIR LINE.—A Wilmington, N. C. report states that Engineer Echols McBee and 18 assistants, of the Seaboard Air Line, have just completed a survey of an extension of the Seaboard Air Line from East Arcadia to Southport, N. C., a distance of about 36 miles.

SHREVEPORT NORTHEASTERN.—M. L. Scovell, Secy.-Mgr. of the Shreveport Progressive League, Shreveport, La., informs us that this line is intended to run from Shreveport to Memphis, Tenn. Immediately, however, it will only be built from Shreveport to Homer. Right-of-way has been secured and most of the grading done on 30 miles and six miles has already been built by another company, which will be absorbed by this one, leaving only about 20 miles to be surveyed and right-of-way secured. A. K. Clingman is Pres., and T. J. Hardeman is Ch. Engr., both at Keithville, La. We were recently informed by T. J. Hardeman "that surveys were completed from Shreveport to Homer via Meridian and right-of-way secured. Contract has been let to A. KINNEBREW & CO., of Homer, La. The line will be 250 miles in length, extending from Shreveport to Homer and other towns and northeasterly to Memphis, Tenn. Capital is arranged for construction."

TAMPA NORTHERN.—A. M. Atkinson, Pres., Atlanta, Ga., informs us that surveys and right-of-way will be secured as soon as possible for this railroad, which is to be built from Tampa, Fla., due north for 50 miles. Capital has been obtained. Contracts for construction are being let now. The PENNSYLVANIA STEEL CO., of Philadelphia, has contract for steel rails. Benjamin Thompson, Tampa, Fla., is Ch. Engr. of construction company.

THOMASVILLE & GULF.—We are officially advised that this company has applied for a charter in Georgia. Capital stock is subscribed for construction and contracts will be let when organization is complete. W. C. Snodgrass, Thomasville, Ga., is an incorporator. The line is to be built from Thomasville to St. Joseph's Bay, Fla., 120 miles.

UNION PACIFIC.—The contract for grading the extension from Central City to Stromsberg, Neb., 22 miles, has been awarded to I. E. DOTY, of David City, Neb. Work will begin at once, it is said.

WABASH.—It is reported that the Wabash R. R. will construct the Uniontown & Wheeling Short Line, and that John Q. Barlow, of Cumberland, Md., Ch. Engr. of the Western Maryland R. R., has been given charge of the engineering work and that negotiations have been opened by Gould representatives for the purchase of the right-of-way and surveys. The price agreed upon is said to be $10,000,000. The railroad will be 68 miles long; the property includes 100,000 acres of coal land, mainly in Green County, Pa.

WAYCROSS, SATILLA & ST. MARYS.—This company has applied for a charter in Georgia to build a railroad from Waycross to Saint Marys, with a branch from Bullhead Bluff, via Folkston, to St. George, a total of 110 miles. The main line will pass through Winokur, Bullhead Bluff and Kingsland. Capital stock, $20,000. H. A. Cannon, of Waycross, Ga., is the promoter, and the other incorporators are: D. Lott, W. E. Simmons, R. T. Hitch, W. H. Cason, M. V. Little, S. Cannon, K. Meeks, W. K. Meeks and J. E. T. Bowden.

ELECTRIC RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

WATERVILLE, ME.—We are officially informed that the Waterville, Oakland & Augusta Ry. Co. is now making surveys for its proposed line to Oakland, Sidney and Augusta, 18 miles. Right-of-way is partly donated. A. F. Gerald, Fairfield, Me., is Pres.; J. A. Jones, Lewiston, Me.

FISHERS ISLAND, N. Y.—Frank E. Hine, Ch. Engr. of the Fishers Island R. R. Co. at Fishers Island, informs us that original surveys have been made and right-of-way obtained for this company's line from Fort Wright to Munndawket Wharf. Capital has been secured. No contracts have been awarded yet. Walten Ferguson, of Stamford, Conn., is Pres. This company was incorporated recently in New York state with $12,000 capital.

MYERSVILLE, MD.—We are officially advised by H. M. Warrenfeltz, Pres. of the Catoctin & Pen Mar Ry. Co., Wolfsville, Md., that the route for this line has been surveyed, but that no further steps have been taken. It is desired to secure capital for construction. The line will run from Myersville through Ellerton, Wolfsville and Foxville to Pen Mar.

FREDERICK, MD.—Charles C. Waters, Secy. of the Washington, Frederick & Gettysburg Ry. Co., Frederick, informs us that contracts for construction will be let probably in April or May. Surveys are made and right-of-way secured for greater portion of the distance between Frederick and Thurmont. Capital is partly secured. D. Columbus Kemp, Frederick, is Pres. C. D. Eldredge is Ch. Engr., Myersville, Md.

CORSICANA, TEX.—We are officially advised that survey work is progressing on line of railway to be built by the Central Texas Traction Co. It will extend from Corsicana to Palestine, 74 miles, via Mildred, Eureka, Stewards Mill, Fairfield and Tennessee Colony. Company is not yet ready to let contracts. H. E. Terry is Ch. Engr., and J. V. Watkins is Gen. Mgr., both at Corsicana.

CHICKASHA, IND. T.—E. E. Colby, Ch. Engr., of the City Ry. Co., writes us that surveys have been made and right-of-way secured for its line. It will cover eight miles of city streets. Capital is all secured or arranged. Company is in the market for overhead wire and banding for return circuit, also power plant. M. B. Louthan is Pres., at Chickasha.

KLAMATH FALLS, ORE.—We are officially advised that the Klamath Canal Co. will let contracts probably about July 1st for building its proposed electric railway line. It will be five miles long from Klamath Falls to North Klamath Falls. C. N. Hawkins is Pres., and W. K. Brown is Ch. Engr., both at Hollister, Cal. Entire right-of-way has been obtained and surveys partly made. Capital is secured.

BOISE, IDAHO.—Victor M. Weil, Pres. of the Boise-Thunder Mountain & Big Creek Ry., Boston, Mass., informs us that contracts will be let in May or June for first 40 miles of proposed line. It is to be about 176 miles long, extending from Boise to Roosevelt, Idaho. L. A. Bullard is Ch. Engr., Boston. Surveys are made and most of right-of-way is secured. $600,000 is already underwritten for its construction. The company was incorporated recently in Boise with $10,000,000 capital. The incorporators named were: Nathan W. Holland, Wolfboro, N. H.; Julius B. Stark, Haverhill, Mass.; Victor M. Weil, Hyde Park, Mass.; Horton A. Hazard, Rockford, Ill.; Edward E. Varians, Newburyport, Mass.; Joseph Stark, Lodea Camba, Bolivia; Samuel W. Thackery, Alden, Pa.; John Kopera, Natrona, Pa.; John Graham, South Manchester, Conn.; and Arthur Halle, G. W. Fletcher, and R. H. Johnson, of New York, N. Y.

LIGHT AND POWER PLANTS.

The names of parties awarded contracts are printed in capital letters.

EASTPORT, ME.—It is said that the Eastport Electric Light Co. will spend about $10,000 for improvements in the near future. L. G. Vose is Supt.

NEWPORT, R. I.—We are officially informed that plans and specifications are being prepared for an electric lighting system for the U. S. naval station at Bradford. R. E. Backenhaus, C. E., U. S. Navy, is in charge.

NEW YORK, N. Y.—Bids are asked until 3 p. m., March 14, for the installation of electrical work in the court-house on East 57th St. John F. Ahearn, Boro. Pres.

NEW YORK, N. Y.—We are officially advised that bids are asked by T. D. Rhodes, Pres. of the City & County Contract Co., 30 Broad St., New York, until March 24, noon, for a power plant. The City & County Contract Co., a corporation of the state of New York, having undertaken to build and equip the New York, Westchester & Boston Railway in accordance with the plans furnished by the Chief Engineer of this railway, is now prepared to let contracts for the power plant covering the construction, delivery, erection and starting in actual operation of the following component parts of the plant, i. e., three steam turbo-alternators with their dependent auxiliaries; 24 water tube boilers with superheaters and their parts; three open exhaust feed water heaters; six horizontal outside packed plunger boiler feed pumps; three surface condensers; 24 mechanical stokers; one 60-ton electric traveling crane. Plans, specifications and all additional information can be obtained at the office of Wm. A. Pratt, Ch. Engr., New York, Westchester & Boston Ry. Co., 30 Broad St., New York City, or at the office of L. B. Stillwell, Consult. Elec. Engr., 100 Broadway, New York City, or Sargent-Lundy Co., Consult. Mech. Engrs., Railway Exchange Bldg., Chicago, Ill.

TICONDEROGA, N. Y.—The Ticonderoga Electric Light & Power Co. is about to make extensive improvements in its lighting plant and will also build a new power plant. B. J. Spearman is Ch. Engr.

WEST POINT, N. Y.—Bids are asked until noon, March 17, for the erection of a power house, excepting the steel construction. Maj. John M. Carson, Jr., Q. M.

BRANCHVILLE, N. J.—It is said that the Branchville Electric Power, Water & Lighting Co. will spend $15,000 on improvements. C. H. Chrisman is Mgr.

SOUTH AMBOY, N. J.—It is reported that the Public Service Corporation has secured ground on Broadway and will shortly build a large power house. E. H. Stevens is Gen. Supt., at Newark, N. J.

MEADVILLE, PA.—A bond issue of $58,000 has been voted for general improvements. The money will be expended in improving the light plant, sewers and paving. H. S. Robinson is City Clk.

SCRANTON, PA.—Contracts have been awarded to the ALLIS-CHALMERS CO., of Milwaukee, for installing engines and generators with a capacity of 2,000 HP. for the new power house of the Lackawanna Light Co. The cost will be about $100,000.

FLORENCE, S. C.—Bids for the construction of a power plant for the Florence Light & Power Co. will probably be asked about April 1. Estimated cost is $150,000. Ladshaw & Ladshaw, Spartanburg, S. C., are Engrs.

CORINTH, MISS.—The Alcorn Electric Light Co. has been organized here and will erect new building and install new machinery. P. T. Jones is Pres.

NEW ORLEANS, LA.—Bids are asked until 11 a. m., March 31, by Bureau of Yards and Docks, Navy Dept., Washington, D. C., for constructing a power house and chimney, as noted in issue of Feb. 8. Specifications are on file at office of Engineering News, New York.

MEMPHIS, TENN.—It [illegible] Memphis Street Railway [illegible] sive improvements, inclu[illegible] tion of a $200,000 brick [illegible] 100 ft., on Poston Ave. [illegible] will be installed.

HOPKINSVILLE, KY.—[illegible] acquired the franchise fo[illegible] Hopkinsville Gas & Ele[illegible] spend about $25,000 in i[illegible] work will begin in a very [illegible]

COLUMBUS, O.—An o[illegible] prepared covering a bond [illegible] to be used in improving [illegible] city electric light plant. [illegible] Supt.

MANSFIELD, O.—It is [illegible] Pennsylvania R. R. Co. [illegible] electric lighting establishm[illegible] furnish light for the yards [illegible] other buildings in the ea[illegible] for the passenger depot.

STEUBENVILLE, O.—[illegible] Power Co. has planned to [illegible] here so that power can be [illegible] ufacturing purposes. Henr[illegible] Engr.

LORAIN, O.—It is said [illegible] being prepared by the B[illegible] for the erection of a new [illegible] ing plant here. Several [illegible] dynamos are to be installed [illegible] and a 125-ft. chimney of [illegible] erected.

WARRENSVILLE, O.—Bid[illegible] March 18 by the Board of [illegible] Cleveland, for installing [illegible] power plant in the transfer [illegible] Cleveland Farm Colony. A. [illegible]

NEWARK, O.—The Newark [illegible] & Power Co. has decided to [illegible] in installing a new power [illegible] Gillette is Pres.

MANISTEE, MICH.—The [illegible] liam Douglas for permission [illegible] Manistee River near Sherman [illegible] upon favorably by the Board of [illegible] of Waxford County. The dam will be about 45 ft. high and will raise the water level about 30 ft., with which head [illegible] HP. can be obtained. It is planned to install three turbo-generators of 1,000 HP. each.

PONTIAC, MICH.—Clinton River Power Co. will erect a power house at an estimated cost of $120,000, bids for which will be asked about April 10. H. von Schon is Engr.-in-Charge.

MASON, MICH.—J. Fred Lewis has been granted a franchise and will erect a $30,000 gas plant.

GRAND RAPIDS, MICH.—The Grand Rapids Gas Light Co. will install a water gas plant capable of generating 1,500,000 cu. ft. daily, and build a new holder and new structures to replace the present warehouse and meter shop. The buildings will be of brick and the total cost of all the improvements is given at $25,000.

LANSING, MICH.—It is reported that the Michigan Power Co. will construct a new power house, at a cost of $250,000. W. S. Schott, Chicago, Ill., Engr.

MENDOTA, ILL.—The McKinley syndicate has secured control of the local gas and electric plants and plans the expenditure of about $10,000 in improvements. Chas. F. Lathrop is Ch. Engr.

PEORIA, ILL.—Contracts have been let to the WESTINGHOUSE CO., of Pittsburg, for transformers, and to the GENERAL ELECTRIC CO., of Schenectady, N. Y., for rotary converters and exciters to be installed in the new power plant of the Central Illinois Traction Co.

MILWAUKEE, WIS.—The Pabst Brewing Co. is to expend $400,000 in the installation of an electrical system for running its entire plant.

GREEN BAY, WIS.—Albert M. Murphy, W. P. Wagner and others, of Green Bay, owners of the Green Bay Traction Co., are reported to have purchased the plant of the Green Bay Gas & Electric Co. It is reported that the two plants will be consolidated and $200,000 expended in improvements.

SHENANDOAH, IA.—The local electric light plant will be rebuilt at a cost of $25,000. Geo. F. Moore is Mgr.

DULUTH, MINN.—C. C. Cokefair, President of the Great Northern Development Co., returned recently from Minneapolis and confirmed the report that his company is about to establish a hydro-electric station on the Mississippi River at Otsego, 25 miles from Minneapolis, to develop 25,000 HP. for the industrial needs of the Twin Cities. The cost of the improvement will be between $3,000,000 and $4,000,000. Construction work will begin early this spring, and it is expected that the power will be available for transmission in one year.

CANON FALLS, MINN.—We are informed that bids will probably be asked until April 10 by the Canon River Electric Power Co. for the erection of a power plant. H. von Schon, Detroit, Mich., is Engr.-in-Charge. Noted in issue of Jan. 18.

TWO HARBORS, MINN.—Contract for the erection of an electric light and power plant for the Duluth & Iron Range R. R. has been let to the ERIE HEATING CO., Railway Exchange Bldg., Chicago. The cost will be about $60,000.

ALEXANDRIA, MINN.—A new lighting plant for the street lighting system is to be constructed. Councilman Fredenberg is one of the committee in charge.

OSAGE CITY, KAN.—It is planned to spend $15,000 for improvements to the municipal electric light plant. G. Dawson is Ch. Engr.

CLINTON, MO.—An issue of bonds for $100,000, to cover the cost of constructing a municipal electric lighting plant, has been authorized.

HARRISBURG, MO.—The Harrisburg Electrict Light & Power Co. has been incorporated by A. A. Boon, Thos. Figurnoy and others. The capital is $25,000.

KIRKSVILLE, MO.—The Kirksville Gas Co. will erect a large new gas plant here, according to press reports.

LAWTON, OKLA.—Louis Bordenkircher, of Lawton, and Charles A. Bigelow have been granted a franchise to construct a natural gas plant.

BRAMAN, OKLA.—The Braman Gas and Development Co., capital stock $20,000, has been chartered by J. W. Bechtel, of Hunnewell, Kas., and others.

WATONGA, OKLA.—We are officially informed that contracts have been awarded the WESTINGHOUSE CO., Pittsburg, Pa.; MURRAY BOILER WKS. and the RIDGEWAY DYNAMO & ENGINEERING CO. for constructing electric light plant here. M. A. Earl, Muskogee, Ind. T., is Consult. Engr.

GUNNISON, COLO.—GEO. SETHMAN, of Denver, has been awarded the contract for constructing the city's new light and water plant, at $100,000. J. J. Hubbard is Ch. Engr.

IONE, ORE.—Council is preparing plans for the erection of a new electric lighting plant.

NEEDLES, CAL.—The Desert Power & Water Co. has been chartered, capital $1,000,000, to build an electric power and light plant at Needles for the purpose of furnishing the surrounding country and Needles with light and power. F. E. Monteverde is Pres. and Gen. Mgr.

DAYTON, NEV.—The Dayton Reduction Co. is preparing to build a large electric power plant to operate its various stamp mills. A new 100-stamp mill is also projected.

GODERICH, ONT.—A power plant to generate 2,575 HP. is to be built on the Maitland River, near this place. J. T. Goldthorpe is interested.

AMHERST, N. S.—The Maritime Coal Co. will build an electric power station here. Wm. Mitchell is Pres.

BRIDGES.

The names of parties awarded contracts are printed in capital letters.

YARMOUTH, ME.—It is reported that the Portland & Brunswick St. Ry. Co., on its proposed extension to this place, is planning to build a steel bridge over the Royal River, 115 ft. long. John Stowell, Freeport, Me., is Ch. Engr.

BARNSTABLE, MASS.—Bids will be asked soon by the County Commissioners for building the proposed bridge over Bass River, according to reports. The bridge is to be 700 ft. long and cost $20,000. Alfred Crocker is Clk. County Comrs.

BOSTON, MASS.—The following bids were received March 5 by the Charles River Basin Comrs., 367 Boylston St., Boston, for constructing and erecting a Scherzer rolling lift bridge over the Charles River here: American Bridge Co., New York, N. Y., $40,800; Boston Bridge Works, Inc., Boston, Mass., $41,562; Penn Bridge Co., Beaver Falls, Pa., $42,800; Pennsylvania Steel Co., Steelton, Pa., $48,666; Strobel Steel Construction Co., Chicago, Ill., $48,865; New England Structural Co., Boston, Mass., $52,800; New Jersey Bridge Co., New York, N. Y., $56,000.

SALEM, MASS.—The following bids were received Feb. 24 by County Commissioners for constructing substructure of bridge at Haverhill, Mass.: New Jersey Bridge Co., Fuller Bldg., New York, $65,431; Patrick McGovern, 6 Beacon St., Boston, $74,248; William L. Miller, 19 Milk St., Boston, $74,804; Holbrook, Cabot & Rollins, 6 Beacon St., Boston, $76,586; Lahey & Buswell, $80,464; John Cashman, West Quincy, Mass., $77,782; MILLER-COLLINS CO., 1133 Broadway, New York, $68,652 (awarded contract).

NEW YORK, N. Y.—The following bids were received by Louis F. Haffen, Boro. Pres., for widening bridge over New York & Harlem R. R., at 177th St.: Gallo & Petelli, 127 Mulberry St., $27,767; John Kenny, Jr., 39 Cortlandt St., $26,923; J. A. Haggerty, 1518 Washington Ave., $29,874; Kelly & Kelly, 39 East 42d St., $28,700; Cooper & Evans, 220 Broadway, $25,700.

SANDY HILL, N. Y.—The supervisors of Washington and Saratoga Counties have adopted plans for a concrete bridge at Sandy Hill over the Hudson River, consisting of 15 spans, each 66 ft. in length.

LONG ISLAND CITY, N. Y.—The Department of Bridges will advertise for bids soon for the construction of a retractible bridge over Dutch Kills Creek at Borden Ave. The span will be 50 ft. and $175,000 have been appropriated.

ATLANTIC CITY, N. J.—The West Jersey & Seashore Ry. has awarded contracts for the bridges across the Atlantic City Thoroughfare in connection with the electrical equipments of the West Jersey Railroad, to ARMSTRONG & LATTA and P. McMANUS, of Philadelphia. The former was awarded the contract for the piling and timber work across the Thoroughfare, 500 ft. in length, and the approach from the Thoroughfare to the Atlantic City Railroad crossing, 650 ft. long. The latter was awarded the contract for the excavation and masonry for the draw span pier.

CAMDEN, N. J.—The following bids were received Feb. 28 for constructing a Strauss trunnion bascule bridge over Cooper's Creek, at Federal St.: New Jersey Bridge Co., Fuller Bldg., New York, $85,000; Toledo & Massillon Bridge Co., Toledo, O., $87,900; Miller-Collins Co., 1133 Broadway, New York, $92,990; Eyre Construction Co., Arcade Bldg., Philadelphia, Pa., $92,000; United Construction Co., Albany, N. Y., $96,114; Owego Bridge Co., Owego, N. Y., $129,[illegible].

WILMINGTON, DEL.—The Levy Court has rejected all bids for the construction of a bridge over Appoquinimink River at Fenimore and work will be readvertised.

BALTIMORE, MD.—The Pennsylvania R. R. is said to be considering the construction of a bridge over the Patapsco River here to be about 1,800 ft. long and 150 ft. high. W. H. Brown is Ch. Engr., at Philadelphia.

NORFOLK, VA.—W. T. Brooke, City Engr., has been asked to prepare plans for a bridge from the foot of East Main St., here, to the foot of Main St., Berkley.

MILTON, N. C.—It is reported that the bridge committee has awarded the contract for the steel bridge across Dan River to the CANTON BRIDGE CO., of Canton, O.

ATLANTA, GA.—The contract for constructing the Washington St. viaduct has been awarded to the OLIVER CO., Knoxville, Tenn., at $70,760, for Sec. 1, and $63,960 for Sec. 2.

FLORENCE, ALA.—It is reported that the PHOENIX BRIDGE CO., Phoenixville, Pa., has been awarded contract for the construction of a bridge for the Southern Railway, to be 62 ft. long, deck riveted, providing for highway on lower deck.

CULLMAN, ALA.—The Board of Revenue is considering the construction of a 400-ft. steel bridge about one mile east of this town.

BATON ROUGE, LA.—It is reported that the Southern Pacific Railway Co. will erect several drawbridges on its line near here.

MONROE, LA.—It is stated that the Vicksburg, Shreveport & Pacific Railroad Co. will build a new drawbridge across Ouachita River here. E. A. Ford, Vicksburg, Miss., is Supt.

CARTHAGE, TENN.—The W. T. YOUNG BRIDGE CO., Nashville, Tenn., has been awarded the contract for constructing a steel bridge, 1,100 ft. in length, over the Cumberland River here, at $51,490.

STRAW PLAINS, TENN.—The Southern Railway, according to reports, intends to build a steel bridge over the Holston River, here. D. W. Lum, Washington, D. C., is Ch. Engr.

SPRINGFIELD, O.—The commissioners of Greene and Clark Counties are contemplating the construction of a bridge over Mad River, near Osborn, to be built of concrete and cost $12,500.

DAYTON, O.—Robert E. Kleine, City Engr., has been instructed by council to prepare plans and specifications for a new concrete bridge to be erected between the central part of this city and Dayton View.

BRYAN, O.—It is reported that bids are asked by R. H. Weaver, County Audr., until 11 a. m., March 23, for the construction of several bridges, both substructures and superstructures.

CRAWFORDSVILLE, IND.—This county will receive estimates about April 1 for seven concrete and steel bridges. Cost, $12,000. J. A. Harding is Engr.; B. F. Carman is County Audr.

ST. PAUL, IND.—The Indianapolis & Cincinnati Traction Co. has awarded a contract to HARMON & HARMON, North Vernon, Ind., for the construction of a concrete bridge over Flat Rock, near here.

URBANA, ILL.—The ILLINOIS STEEL & BRIDGE CO., Jacksonville, has been awarded the contract for constructing an iron bridge on South Market St.

PEKIN, ILL.—The contract for constructing a bridge in Malone Township has been awarded to the DECATUR BRIDGE CO., Decatur, Ill.

HEYWORTH, ILL.—Plans have been prepared for a 75-ft. deck-girder iron bridge with concrete abutments to be erected over Kickapoo Creek, north of this place, for the Illinois Traction System. L. E. Fischer is Gen. Mgr., at Danville, Ill.

ATKINSON, ILL.—The contract for a steel bridge over Mud Creek has been awarded to the CLINTON BRIDGE & IRON CO., Clinton, Ia., at $1,775.

MILWAUKEE, WIS.—Bids are asked, it is reported, by the Board of Public Works until March 9 for the construction of the first section of the superstructure of the 27th St. viaduct. Estimated cost, $110,000. Charles J. Poetsch is Chn.

WICHITA, KAN.—A special election will be held soon to vote on the issuance of bonds for a bridge over the Arkansas River at Douglas Ave. Estimated cost is about $70,000.

WAYNE, NEB.—Contract for building and repairing bridges during the year 1906 was let to the STANDARD BRIDGE CO., Omaha.

MADISON, NEB.—Bids are asked by George E. Richardson, County Clk., until noon, March 20, for the construction of steel and wood bridges for the period of one year.

PLATTSMOUTH, NEB.—The contract for building bridges in Cass County during the ensuing year has been awarded to SHEELY & CO., Lincoln, Neb.

CHAMBERLAIN, S. DAK.—The Chicago, Milwaukee & St. Paul R. R. is considering the construction of a steel bridge to replace the temporary pontoon bridge now in use near here. The estimated cost of the proposed bridge is about $1,000,000. C. F. Loweth is Engr. and Supt. Bridges and Bldgs., at Chicago.

COFFEYBURG, MO.—Bids will be asked shortly by W. Donell, of this city, according to reports, for the construction of a steel bridge over the Grand River. Estimated cost, $5,500.

HENRIETTA, TEX.—Bids are asked, it is reported, until March 19 for the construction of a steel bridge, 210 ft. in length, over the Big Wichita River. Estimated cost, $5,400. C. L. Karsteter, County Clk.

HOUSTON, TEX.—Bids are asked until noon, March 14, by the commissioners of Harris County for the construction of a bridge over Big Cypress Creek.

SALIDA, COLO.—It is reported that this city and the Denver & Rio Grande R. R. will jointly build a bridge across the Arkansas River here, to be 120 ft. long and 60 ft. wide, of concrete, with a center pier. Estimated cost, $16,000. E. J. Yard is Ch. Engr. of the railroad company, at Denver.

TRINIDAD, COLO.—Bids are asked until noon, March 22 for constructing two bridges, concrete or steel span with concrete abutments. A. M. Holt, County Surv.

COLORADO SPRINGS, COLO.—C. H. Bristol, of Pueblo, Div. Supt., Atchison, Topeka & Santa Fe. Ry., has stated that the company is considering the expenditure of $100,000 for a viaduct on East Huerfano St.

CANON CITY, COLO.—It is reported that the bridge over Royal Gorge, near this place, will be erected in connection with an electric railway system projected by F. S. Granger, of San Jose, Cal. Estimated cost, $100,000. Noted last week.

SEATTLE, WASH.—Council is considering adoption of plan for railroads to enter the city by overhead bridges. Estimated cost of bridges to be constructed under this plan is about $3,000,000 and railroads affected by it would be the Northern Pacific, Columbia & Puget Sound, Washington & Northwestern and the Chicago, Milwaukee & St. Paul. R. H. Thompson is City Engr.

GOLDENDALE, WASH.—Bids are asked until 1 p. m., April 6, for the construction of two bridges. A. M. MacLeod, County Audr.

SALEM, ORE.—Council is considering erection of a concrete bridge at Commercial St., costing about $4,500.

SUTTER CREEK, CAL.—Board of Supervisors have awarded a contract to COTTON BROS. for the construction of a bridge over Sutter Creek, at $3,892.

BUILDINGS.

The names of parties awarded contracts are printed in capital letters.

BANGOR, ME.—John R. Graham is to erect a reinforced concrete office building here at an estimated cost of about $100,000.

RUTLAND, VT.—J. Frank Leonard, Secy., has stated that a new Y. M. C. A. building would be erected at a cost of $50,000.

FALL RIVER, MASS.—JOHN CROWE, of this city, has been awarded a contract for construction of the second Fall River Boys' Club-house for M. C. D. Borden. Building will be three stories, brick and stone. Contract does not include heating, lighting and plumbing. Joseph M. Darling is Arch.

UTICA, N. Y.—The Conners Bros. Construction Co., Lowell, Mass., desires to let the laying of about 3,000,000 brick and a large amount of terra cotta at this place. Work can start at once. (Advertised, Engineering News, March 1.)

ROCHESTER, N. Y.—Plans have been filed for the James C. Hart Memorial addition to the City Hospital. Building will be fireproof, 167 × 46 ft., one story, costing $50,000.

NEW YORK, N. Y.—Bids are asked by the Armory Board until 2 p. m., March 14, for the construction of an extension to the 13th Regiment Armory, Boro. of Brooklyn. George B. McClellan, Mayor and Chn.

NEW YORK, N. Y.—Theodore C. Visscher, Arch., 425 Fifth Ave., has plans in progress for a residence to be erected at 38 West 53d St. for F. L. Hine. Brick and stone, five stories, 50 × 60 ft.

Plans are in progress at the office of William B. Tuthill, Arch., 287 Fourth Ave., for an industrial school to be erected at 243 East 103d St. for the American Female Guardian Society. Brick and stone, five stories, 25 × 100 ft.

Trowbridge & Livingston, Archs., 424 Fifth Ave., have plans in progress for a stable to be erected at 207-213 East 36th St., running through to 37th St., for B. Altman & Co. Building will be fireproof, brick and stone, five stories, 100 × 100 and 50 × 100 ft.

Bannister & Schell, Archs., 69 Wall St., are taking figures on a loft building to be erected at 165 William St. for R. R. Reed, 55 Liberty St. Brick and stone, ten stories, 50 × 60 ft.

Plans are in progress for an addition to the building at Broadway and 27th St. for the Schieffelin estate. Brick, five stories, 125 × 125 × 125 × 150 ft. Maynicke & Franke, Archs., 298 Fifth Ave.

NEW YORK, N. Y.—The P. J. CARLIN CONSTRUCTION CO., 1 Madison Ave., has been awarded the general contract for construction of a telephone exchange building to be erected at Wooster and Houston Sts. for the N. Y. & N. J. Telephone Co. Six stories, brick, 100 × 100 ft. Eidlitz & McKenzie, 1123 Broadway, are Archs.

Williams Engineering & Contracting Co., Park Row Bldg., has plans in progress for a garage to be erected for J. Fuchs, 242 East 102d St. Building will be of reinforced concrete construction, 75 × 100 ft.

Plans have been completed by Maynicke & Franke, Archs., 298 Fifth Ave., for the erection of an office building at Fifth Ave. and 47th St. for Simon Frankel, 68 Nassau St. Building will be 11-story, brick and stone, 50 × 100 ft.

William D. Johnston, Westchester Ave. and Southern Boulevard, Boro. of Bronx, has completed plans for a department store to be erected at Third Ave. and 149th St. for the American Real Estate Co. Building will be brick and stone, seven stories, 60 × 100 ft., costing $300,000.

NEW YORK, N. Y.—I. Grossman, 207 Broadway, will build a 7-story, brick and stone, loft building, 50 × 100 ft., at 103 Avenue A, and wants bids on subcontracts. C. M. Straub, 122 Bowery, is Arch.

NEW YORK, N. Y.—MARC EIDLITZ & SON, 489 Fifth Ave., has the general contract for the construction of the new building to be erected at 20-24 Vesey St. for the New York Evening Post. Bids on sub-contracts are desired. Building will be brick and marble, 12 stories, 75 × 100 ft. R. D. Kohn, 170 Fifth Ave., is Arch. A. R. Wolff, 130 Fulton St., is Steam Engr., and E. W. Stern, 7 West 38th St., is Steel Engr.

C. T. WILLS, 156 Fifth Ave., has been awarded the general contract for the erection of a 16-story, brick and stone office building, 140 × 260 ft., at 34th St. and Sixth Ave., for W. R. H. Martin. Townsend, Steinle & Haskell, Archs., 29 East 19th St.

Warren & Wetmore, Archs., 3 East 33d St., are taking figures on a loft building to be erected at 34 West 34th St. for J. Goldsmith. Brick and marble, five stories, 40 × 100 ft.

NEW YORK, N. Y.—Trowbridge & Livingston, Archs., 424 Fifth Ave., have plans in progress for a residence to be erected on Riverside Drive for D. Jackson. Brick and stone, five stories, 30 × 90 ft.

The Berlin Construction Co., 220 Broadway, is taking figures on a fish market building to be erected at Pier 17, East River, for the Fulton Market Fish Mongers. Building will be brick and stone, four stories, 100 × 200 ft.

Plans are in progress for an apartment house to be erected at 110th St. and Seventh Ave. for J. Cussani. Building will be brick and stone, six stories, 100 × 125 ft. H. Anderson, 1181 Broadway, is Arch.

The Armory Board will invite plans for the erection of a new armory for the Second Battery at 166th St. and Franklin Ave. Estimated cost, $450,000. George B. McClellan, Mayor, is Chn.

NEW YORK, N. Y.—George Hildebrand, 38 Park Row, New York, was lowest bidder for the general construction, etc., of additions to and alterations in Public School No. 4, on Shore Road, Boro. of Richmond, at $47,980. Bids were opened March 5.

H. M. Weed & Co., 124 West 45th St., New York, were lowest bidders for the general construction of additions to and alterations in Public School No. 51, Boro. of Manhattan, at $126,800.

Bids are asked by C. B. J. Snyder, Supt. School Buildings, until 11 a. m., March 19, for installing heating and ventilating apparatus for addition to and alterations in Public School No. 53, Boro. of Manhattan; for the general construction of addition to and alterations in Public School No. 50, on Wyckoff St., Boro. of Queens; for alterations, repairs, etc., at Public School No. 17, Prospect Ave., Boro. of Richmond.

ORANGE, N. J.—Bids are asked, until March 15, by the Board of Education for the construction of a new school. Estimated cost, $85,000. H. D. Hall, 11 East 24th St., New York, is Arch.

JERSEY CITY, N. J.—J. T. Rowland, Jr., Arch., 15 Exchange Place, has plans completed for a warehouse to be erected at Railroad Ave. for J. W. Greene. Building will be brick, 4-story, 100 × 100 ft.

CONVENT STATION, N. J.—T. F. Houghton, Arch., 213 Montague St., Brooklyn, N. Y., has prepared plans and is taking figures on a chapel to be erected here for the Sisters of Charity. Brick and stone, one story, 70 × 170 ft.

NUTLEY, N. J.—Plans are in progress for a brick school to be erected by the city, four stories, 50 × 50 ft. C. J. Jones, 280 Broadway, New York, is Arch.

ATLANTIC CITY, N. J.—The contract for the construction of a 2-story, brick, stone and iron building here for the Childs Restaurant Co. has been awarded to THOMPSON & STILES, of this city, at $75,000.

NEWARK, N. J.—Bids are asked until 3 p. m., March 13, for the construction of boat and field houses in Branch Brook Park. Rossiter & Wright, Archs., 95 Liberty St., New York. A. Church, Secy. Essex County Park Comn. (Advertised, Engineering News.)

PRINCETON, N. J.—We are officially advised that the contract for constructing "McCosh Hall" has been awarded to WILLIAM R. MATHEWS, of Princeton, at about $395,000. R. C. Gildersleeve, 150 Fifth Ave., New York, is Arch.

PHILLIPSBURG, N. J.—Seymour & Davis, Archs., 1600 Chestnut St., Philadelphia, Pa., will prepare plans for a high school at this place. Stone and brick, three stories, costing $60,000.

McKEESPORT, PA.—It is reported that Mowbray & Uffinger, Archs., 92 Liberty St., New York, will prepare plans for the new banking house for the People's Bank, to be erected at Fifth Ave. and Walnut St. Six stories, 80 × 115 ft., costing $100,000. E. W. Pitts is Pres.

WYNNEWOOD, PA. — WILLIAM R. DOUGHERTY, 1604 Sansom St., Philadelphia, Pa., has been awarded the contract for the construction of a residence here for M. C. Smyth. Stone, three stories, costing $60,000.

ALLEGHENY, PA.—According to reports the Baltimore & Ohio Railroad has decided to erect a station, costing $1,000,000, in Allegheny, where the Pittsburg and Western depot now stands. William Graham, Baltimore, is Asst. Engr. Bridges and Buildings.

PHILADELPHIA, PA.—Watson & Huckel, Archs., 1211 Walnut St., are preparing plans for a hotel at 1428 South Penn Sq. Brick, stone and steel, fireproof, 16 stories, 90 × 130 ft.

The Broad Street Realty Co., 1339 South Penn Sq., has had plans prepared for a theater to be erected at Broad and Walnut Sts. Granite, brick and steel, fireproof, costing $200,000.

Ballinger & Parrot, Archs., 1100 Chestnut St., have been commissioned to prepare drawings and specifications, and will invite estimates soon for a new parochial school building and sisters' house for St. Stanislaus's Catholic Church. The cost will be about $150,000.

BALTIMORE, MD.—G. A. BLAKE, 301 Law Bldg., Baltimore, has received contract amounting to $59,000, for erecting for the Realty Improvement Co., of Baltimore, a 3-story building, 53 × 63 ft., to be used as a ticket office by the Pennsylvania R. R. Co., at Baltimore and Calvert Sts.

Archer & Allen, Archs., 47 Central Savings Bank Bldg., have prepared plans for a 3-story warehouse to be erected for Isaac Brooks, at 122-4 South Calvert St. The building will be 50 × 43 ft., brick with granite and Indiana limestone trimmings.

WASHINGTON, D. C.—Elliott Woods, Supt. U. S. Capitol Grounds and Bldgs., has awarded to the VERMONT MARBLE CO.,

Proctor, Vt., contract for interior cut stone work for the rotunda section, office building, House of Representatives, at $204,500.

Bids were opened Feb. 28 by Elliott Woods, Supt. U. S. Capitol Grounds and Bldgs., for the steel framing incident to the construction of the office buildings for the House of Representatives and the Senate as follows: American Bridge Co., Baltimore, Md.: House, $61,900, alternate, $61,550; Senate, $33,500. Jones & Laughlin, Pittsburg: House, $61,840, alternate, $57,980; Senate, $32,110.

J. M. Dunn, 1324 Fifth St. N. W., was lowest bidder for constructing a public convenience station, bids for which were opened Feb. 21, at $17,000. Henry B. F. Macfarland is Dist. Comr.

WASHINGTON, D. C.—Bids are asked until 3 p. m., March 22, by James Knox Taylor, Supervising Arch. Treas. Dept., for the installation of vacuum cleaning system complete for the U. S. Custom House building, Baltimore, Md. (Advertised, Engineering News.)

WASHINGTON, D. C.—The GEORGE A. FULLER CO., Home Life Bldg., has been awarded a contract for an addition to a department store for W. B. Moses & Sons on Eleventh St. Brick, stone and steel, fireproof, six stories.

The THOMPSON-STARRETT CO., Commercial National Bank Bldg., has been awarded a contract for a 7-story, brick, stone and steel, fireproof apartment house at Mt. Pleasant for S. M. Woodward.

JACKSONVILLE, FLA.—It is reported that the Sea Board Air Line has about completed arrangements for proposed improvements at Jacksonville to cost about $500,000, including the building of dock, 100 × 390 ft.; 4-story, white pressed-brick office building, with marble front, equipped with elevators; two warehouses, each two stories, 150 × 750 ft. W. T. HADLOW CO. has contract for the construction.

ASHLAND, ALA.—Bids are asked until March 15 for the construction of a court-house. Charles W. Carleton, Anniston, Ala., is Arch. F. J. Ingram, Judge of Probate.

MOBILE, ALA.—Bids are asked until April 3 by the Board of Revenue of Mobile county for the erection of a jail. Rudolph Benz & Sons, Masonic Temple, Mobile, are Archs.

MEMPHIS, TENN.—Hale & Rogers, Archs., 11 East 24th St., New York, have plans in progress for a court-house to be erected here at a cost of $1,000,000. Building will be brick, stone and steel. Boilers of 600 HP. capacity, engines of 300 HP. and generators of 200 KW. capacity will be required.

CLEVELAND, O.—The Wheeling & Lake Erie R. R. will erect a new passenger station on Ontario St. here to cost about $125,000. G. S. Rollett is Const. Engr., at Canton, O.

ATHENS, O.—We are officially advised that contract for the new high school here will be awarded about March 20. Building will be 2-story, 175 × 80 ft., brick, costing about $55,000, and not $100,000 as previously reported. Edward C. Van Leyn & Edward A. Schilling, Detroit, Mich., are Archs.

NEWARK, O.—W. C. HANDSHY, Zanesville, is reported to have been awarded the general contract, which includes everything except elevator and banking equipment, for erecting the brick bank and office building, 36 × 126 ft., for the Newark Trust Co. Richards, McCarthy & Bulford, Archs., 63 The Ruggery, Columbus. Estimated cost, $100,000.

SOUTH BEND, IND.—S. S. Beman, Arch., 203 Michigan Ave., Chicago, has completed revised plans, which have been accepted, and is taking figures on a Y. M. C. A. building to be built here. It will be 4-story, 165 × 100 ft., of pressed brick and terra cotta, and cost $200,000. F. A. Messler is Secy.

KOKOMO, IND.—The Indianapolis-Northern Traction Co. will ask for bids soon for the construction of a new passenger and freight station on Union St. A. R. Bruff is Arch.

CONNERSVILLE, IND.—The Cincinnati, Hamilton & Dayton R. R. Co. has ordered plans for a modern passenger station to be constructed at this place. The building will be of brick and stone and let to contract. C. A. Wilson, Cincinnati, is Ch. Engr.

JACKSON, MICH.—RICKMAN & SON, of Kalamazoo, have been awarded the contract for the erection of the Y. M. C. A. building here, at $73,850.

DETROIT, MICH.—Bids are asked until noon, March 12, for the construction of a casino building at Belle Isle Park. E. C. Van Leyen and E. A. Schilling are Archs. Estimated cost, $80,000. R. E. Bolger, Comr.

LANSING, MICH.—The State Board of Education has adopted plans submitted by E. W. Arnold, Arch., Battle Creek, for the new building of the Marquette normal school. Estimated cost, $50,000.

We are officially advised that contract for construction of the engineering building for the Agricultural College will be let about April 1. E. A. Bowd, Lansing, is Arch. Noted on Feb. 22.

CHICAGO, ILL.—H. L. Ottenheimer, Arch., 134 Monroe St., is reported to be preparing plans for an apartment building, to be erected at 46th St. and Indiana Ave., for T. F. Conrad. To be three stories, 70 × 162½ ft., built of brick and stone, costing $75,000.

It is reported that Postle & Mahler, Archs., 204 Dearborn St., let the general contract for a warehouse, to be erected at 36th and Morgan Sts., for the Universal Trading & Supply Co., 100 East Lake St., to J. P. & J. W. O'CONNOR, 188 E. Madison St. To be four stories, 50 × 200 ft., built of brick, of mill construction, with fireproof roof. Estimated cost, $50,000.

CHICAGO, ILL.—D. H. Burnham & Co., Archs., 1417 Railway Exchange Bldg., are reported to have let the masonry and foundation work to the THOMPSON-STARRETT CO. 1400 Railway Exchange Bldg., for the addition to the store of Carson, Pirie, Scott & Co., at State and Madison Sts. It will be 12-story, 105 × 144 ft., with foundation substantial enough to carry 18 stories, and cost about $900,000.

The Fine Arts Corporation, 203 Michigan Ave., contemplates the addition of six stories to the Fine Arts building, according to reports; and also an addition to a corresponding height to an adjoining building now occupied by the Chicago Musical College. The improvements will cost about $600,000. S. S. Beman, 203 Michigan Ave., Arch., will prepare the plans.

F. V. Newell, Arch., 78 La Salle St., is reported to be preparing plans for apartments, to be erected at Groveland Park, for Charles H. Lawrence. To be three stories, 150 × 260 ft., brick and stone, costing $225,000.

Holabird & Roche, Archs., 1618 Monadnock Block, are reported to have let the general contract to JOHN GRIFFITHS & SON, 135 Adams St., for the fourth section of the Boston store, to be built on Dearborn St. It will be 163 × 80 ft., 7-story, of polished granite for the lower two stories and glazed terra cotta above. Estimated cost, $700,000.

Tentative plans are being considered by Eitel Bros. for the construction of a new hotel, 15 stories, 100 × 180 ft., fireproof, brick, stone and terra cotta, costing about $1,200,000.

John S. Metcalf & Co., Archs., 184 La Salle St., let the general contract to the MACDONALD ENGINEERING CO., 553 Monadnock Block, it is reported, for the reconstruction of the Santa Fe grain elevator at 27th and Wood Sts., for Harris, Scotten & Co., 37 Board of Trade Bldg.

DAVENPORT, IA.—It is reported that bids are asked until March 20 for the construction of a 6-story brick, stone and terra cotta hotel building, 150 × 103 ft., at Fourth and Main Sts., for the Davenport Hotel Co. Temple, Burrows & McLane, McManus Bldg., Davenport, Archs. Estimated cost, $400,000.

ST. PAUL, MINN.—Bids are asked until March 10 by the State Board of Control, O. B. Gould, Chn., St. Paul, for constructing the main building at the State Agricultural College. Estimated cost, $250,000. C. H. Johnson, Arch, St. Paul.

DULUTH, MINN.—The Peavey elevator, valued at $335,000, was recently burned, and will be rebuilt at once. A. L. Searle is Mgr.

F. G. German, Arch., Torrey Bldg., will prepare plans for a new Y. M. C. A. building, to cost about $150,000.

ELY, MINN.—The contract for a new high school building has been awarded to SMITH & VOKES, Duluth, at about $60,000.

JOPLIN, MO.—Barnett, Haynes & Barnett, Frisco Bldg., St. Louis, are Archs. in connection with the hotel, noted recently, to be erected for Thomas Connor, of this city.

ST. LOUIS, MO.—The KELLERMANN CONSTRUCTION CO. has been awarded the contract for a hotel to be erected at 18th St. and Washington Ave. Sixteen stories, 130 × 150 ft., costing about $500,000.

GEORGETOWN, TEX.—The Georgetown University will erect a dormitory at a cost of $50,000. C. H. Page, Jr., of Austin, is Arch.

SEATTLE, WASH.—Saunders & Lawton, Archs., New York Block, have plans in progress for a 6-story reinforced concrete hotel for R. B. McCormick. Estimated cost, $200,000.

Plans will be prepared by Saunders & Lawton, Archs., for a new theater for J. P. Howe and associates. Estimated cost, $100,000.

SAN FRANCISCO, CAL.—Board of Works has awarded a contract for the construction of the Monroe school to WILLIAM NEWSOM, at $59,900.

MONTREAL, QUE.—H. M. Marler and associates will erect an apartment house, four stories, brick and stone, costing about $150,000. Finley & Spencer, Guardian Bldg., are Archs.

WATER SUPPLY—IRRIGATION.

The names of parties awarded contracts are printed in capital letters.

PORTLAND, ME.—Worster & Wilson, Portland, Me., were the lowest bidders for extension of water main at Ft. Williams. Noted in issue of Feb. 8. Capt. A. W. Yates, Q. M., U. S. A.

LOWELL, MASS.—The village of Dracut has voted to issue bonds for $50,000 to cover cost of erecting a water-works system. Silas R. Coburn, Clk.

NEW YORK, N. Y.—Bids are asked until 11 a. m., March 15, by Francis J. Lantry, Commissioner of Correction, 148 East 20th St., for the installation of a new fire line and stand-pipes on Hart's Island.

GREAT NECK (L. I.), N. Y.—The Citizens' Water Supply Co., of Newtown, has contracted to build a plant and supply this place and Thomaston with water. The company will erect at Cutter Mill Crossing a pumping station to cost $35,000. The entire plant will cost nearly $100,000 and will have a capacity of 2,500,000 gallons a day. J. E. Meyer, Secy.

BLACKWOOD, N. J.—The Blackwood Water Co. has been organized with a capital of $25,000 for the purpose of building a water-works system. J. W. Morgan, of Camden, and others, are interested.

ATLANTIC CITY, N. J.—The E. KEELER CO., 238 West St., Williamsport, Pa., has been awarded contract for furnishing 200-HP. boilers for the Absecon pumping station, at $5,400. L. Van Gilder is Ch. Engr.

ALTOONA, PA.—We are officially informed that a new water system will be built at a cost of $300,000. Harvey Linton is City Engr.

WASHINGTON, D. C.—Bids have been received at the office of the District Commissioners, Washington, for furnishing 600 tons of cast-iron water pipe. The following bids were received: M. J. Drummond & Co., New York, $32.50 per ton; United States Cast-Iron Pipe & Foundry Co., Land Title Bldg., Philadelphia, $32.40 per ton; Lynchburg Foundry Co., Lynchburg, Va., $31.35 per ton.

CHATHAM, VA.—The water-works plant will be enlarged and improved at a cost of $10,000. A new standpipe will be erected.

NORFOLK, VA.—The BELL ENGINEERING & CONSTRUCTION CO. has been awarded contract for coagulating basin improvements, noted in issue of March 1, at $23,680.

NORFOLK, VA.—Bids are asked until 10 a. m., March 13, for a water system at the marine barracks, Norfolk navy yard. Col. F. L. Denny, Q. M., U. S. M. C.

GEORGETOWN, S. C.—We are officially advised that E. J. O'BEIRNE, Atlanta, Ga., and JOHN J. CAIN, Columbia, S. C., have been awarded the contract for constructing a water supply plant for the Atlantic Coast Lumber Corporation, at $97,927. Other bids were: M. H. Kelly, $110,639; G. O. Tenney, $112,123; Guild & Co., $128,580; Dimmick Pipe Co., Birmingham, Ala., 900 tons cast-iron pipe, $24,615; U. S. Cast-Iron Pipe & Foundry Co., 80 Broadway, New York, 2,000 tons cast-iron pipe, $24,500; Colorado Supply Co., lead, $7,880. Chas. C. Wilson, Consult. Engr.

ATLANTA, GA.—Bids are asked until March 21 by Board of Water Commissioners for 6-in. valves and 50 fire hydrants.

COLUMBUS, GA.—We are officially informed that Stone & Webster, 84 State St., Boston, have arranged for the purchase of the Columbus Power Co., the Coweta Power Co. and the Chattahoochee Falls Co. The purchase of these companies gives control of all water power property practicable for development on the Chattahoochee River for a distance of 30 miles. A 3,000-HP. steam plant will be constructed.

VICKSBURG, MISS.—The city of Vicksburg has voted an issue of bonds amounting to $115,000 for general improvement purposes. B. W. Griffith is Mayor.

DONALDSONVILLE, MISS. — Bids are asked until 8 p. m., March 21, by Chas. Maurin, Mayor, for extensive improvements to water-works plant. W. Mackintosh, Abbeville, La., is Consulting Engr. Mentioned in issue of Feb. 8.

NEW ORLEANS, LA.—Bids are asked until noon, May 15, by the Sewerage and Water Board for furnishing and laying about 100 miles of from 4 to 24-in. water pipe. F. S. Shields, Secy. (Advertised, Engineering News.)

BOWLING GREEN, KY.—Specifications are being prepared for a 3,000,000 gallon pumping engine to be installed in the pumping station here. Granbury Jackson is Engr. in charge.

CINCINNATI, O.—We are officially informed that CHAS. J. CLOSE, Columbus, O., has been awarded the contract for building the Western Hills pumping station, at $51,920. Elmer G. Prior is City Clk.

DAYTON, O.—The U. S. Cast-Iron Pipe & Foundry Co. was the lowest bidder for 400 tons of cast-iron pipe at $11,400.

HOWARD CITY, MICH.—The village will vote at the spring election to bond for approximately $11,000 for the extension of the water service.

AURORA, ILL.—It is planned to build a combined pumping station and lighting plant in the near future. J. Douglas is Mayor.

CHICAGO, ILL.—Bids are asked until 11 a. m., March 20, to construct and install three live steam purifiers at the Chicago Ave. pumping station.

HEBRON, ILL.—T. H. Inglehart, Morgan Park, Ill., was lowest bidder for constructing a water-works system here at $8,376.

ST. CHARLES, ILL.—A bond issue of $12,000 has been voted to cover the cost of constructing a complete water system.

MILWAUKEE, WIS.—Contracts for laying water pipe during the year 1906 have been awarded as follows: T. J. SZUKALSKI, for the 4-in. pipe, at 28 cts. per lin. ft.; JAMES O'DONNELL, the 6-in., at 31½ cts.; GEORGE E. ZIMMERMANN, the 8-in., at 36 cts.; JAMES O'DONNELL, the 12-in., at 31½ cts.; GEORGE E. ZIMMERMANN, the 16-in., at 64 cts.; THE UNITED STATES CAST-IRON PIPE & FOUNDRY CO., 600 tons of 6-in., at $30 per ton.

TOPEKA, KAN.—The DIMMICK PIPE CO., Birmingham, Ala., has been awarded the contract to furnish 16,000 ft. of water pipe, at $7,884.

OSAGE CITY, KAN.—It is said that this city is preparing to establish a complete water-works system.

FREMONT, NEB.—The water system will be extended into the Northside addition in the near future and mains will be laid in several other streets.

BENSON, NEB.—Contracts for the construction of new water-works system has been let at a total cost of $20,000. CRANE & CO. received the contract for furnishing the material. DRAKE, WILLIAMS & MOUNT CO. will furnish the stand-pipe, and THOMPSON & HITCHCOCK, of Springfield, will erect the building and construct the reservoir.

RAPID CITY, S. DAK.—HENRY BIRNBAUM, of Rapid City, has been awarded contract for water plant, at $5,094. Noted fully in issue of Feb. 15.

FARGO, S. DAK.—Plans for ten blocks of 6-in. c.-i. pipe, with hydrants, have been filed and bids asked by the city council. S. F. Crabbe, City Engr.

CLINTON, MO.—City has voted $100,000 water-works and lighting bonds. Burns & McDonnell, Engineers, Kansas City, have prepared plans and estimates.

GUNNISON, COLO.—GEO. H. SETHMAN has been awarded contract for municipal water and light plant, at $109,000.

BOULDER, COLO.—Bids are asked until March 25 for steel pipe and valves to be used in the construction of mountain water mains. Eugene [illegible] system of [illegible]lder, City Clk.

HOLYOKE, COLO.—We are [illegible]ficially informed that city is about to [illegible]chase the present water-works system a[illegible] a new pumping plant. W. [illegible] Town Clk.

STROUD, OKLA.—J. W. CO[illegible] & SON, of Ft. Scott, Kan., have been a[illegible] contract for water-works system. J. [illegible] Clk.

WOODWARD, OKLA.—The [illegible]MERICAN LIGHT & POWER CO., Kan[illegible] City, Mo., has been awarded the contract [illegible] construct a complete water-works syste[illegible] at $47,000.

CHICKASHA, IND. T.—Bi[illegible] are asked until March 21 for water-wor[illegible] and sewer extensions at an estimated [illegible] of about $43,000.

CHICKASHA, IND. T.—See [illegible] Electric Railways.

SEATTLE, WASH.—It is repo[illegible] that this city will spend $90,000 this yea[illegible] building a reservoir at Woodland Par[illegible] with a capacity of 50,000,000 gallons. [illegible] Thomp son is City Engr.

PRESCOTT, WASH.—Contra[illegible] build a water-works system has bee[illegible] arded to the HINES-UTTER CO., at $[illegible]

WALLA WALLA, WASH[illegible] be NATIONAL WOOD PIPE CO., Ol[illegible], Wash., has been awarded the contract [illegible] furnishing pipe for the new gravity [illegible] system, at $69,000.

PENDLETON, ORE.—It is repo[illegible] that an auxiliary reservoir is to be co[illegible]ructed by the government in connection [illegible] the East Umatilla reservoir in the north part of the county.

GRASS VALLEY, CAL.—Contracts have been let to local firms for improvements to water mains at $4,000. W. B. Van Orden, Mayor.

DRAPER, UTAH.—J. W. Smith and A. J. Nelson have been granted the franchise and will begin work on a new water-works system at once.

GRAND FALLS, N. B.—The Grand Falls Power Co., of St. John, N. B., has deposited with the Minister of Public Works of Canada plans of a dam and other works which they propose to build on the River St. John, at the Grand Falls.

EDMONTON, ALTA.—Bids are asked until March 20 for 500 tons of water pipe and a quantity of gate valves and hydrants. J. H. Hargreaves, City Engr. (Advertised, Engineering News.)

WINNIPEG, MAN.—Bids are asked until 3.30 p. m., March 26, by J. C. Gibson, Chn. Fire, Water and Light Com., for furnishing water pipe, meters, etc. C. J. Brown is City Clk. (Advertised, Engineering News.)

SEWERAGE.

The names of parties awarded contracts are printed in capital letters.

SALEM, MASS.—Council has appropriated $75,000 for the completion of the North River trunk sewer. G. F. Ashton is City Engr.

BOSTON, MASS.—The HUGH NAWN CONSTRUCTION CO., 13 Avon St., has been awarded the contract for constructing a high level sewer at Dorchester, at $17,496.

BOSTON, MASS.—JOHN F. CULLEN has been awarded contract for sewer construction at West Roxbury at $3,860.

MARION, MASS.—E. B. ROBERTS, Old South Bldg., Boston, has been awarded contract for sewer construction at $16,112. The DAVID W. LEWIS CO. will furnish vitrified pipe at $5,000. M. J. DRUMMOND & CO. will furnish cast iron pipe at $2,120.

NEW YORK, N. Y.—Bids are asked until 11 a. m., March 15, by Louis F. Haffen, Pres. Boro. Bronx, for constructing sewer and appurtenances in West 261st St.

Bids are also asked, to be opened at the same time, for constructing a sewer in Briggs Ave.

NEW YORK, N. Y.—Bids are asked until noon, March 13, for constructing sewers in various streets and for furnishing various items to the sewer department. George Cromwell, Pres. Boro. Richmond.

NEW YORK, N. Y.—Bids are asked until 3 p. m., March 14, for sewer construction in 151st St. John F. Ahearn, Boro. Pres.

MOHAWK, N. Y.—The BURT-KASSON Co., Gloversville, N. Y., has been awarded the contract for sewer construction, at $31,819. Noted in issue of March 1.

PERTH AMBOY, N. J.—Bids are asked until 8.30 p. m., March 19, for sewer construction. W. H. Fullerton, Street Comr.

OIL CITY, PA.—Bids will soon be asked for the construction of a sewerage system, to cost about $48,000. C. W. Mullalley is City Controller.

ERIE, PA.—Bids are asked until March 31 by the joint street committee of council for the construction of about 850 ft. of 9-in. sewerage. B. E. Briggs is City Engr.

WASHINGTON, D. C.—Bids have been received at the office of the superintendent of the U. S. Capitol buildings and grounds, for furnishing cast iron soil and drain pipe and fittings, to be used in connection with the plumbing work for the United States Senate office building. Central Foundry Co., 116 Nassau St., New York, was low bidder at $7,363.

FRANKLIN, VA.—Bids are asked until March 27 for the construction of a sewerage system.

COLONIAL BEACH, VA.—A sewer and water system, to cost $30,000, is being planned for this place. Chas. S. York, Baltimore, Md., is Consult. Engr.

LEXINGTON, N. C.—Contract for the completion of the sewerage system has been awarded to GUY & CO., of Chattanooga, Tenn., at $14,[illegible] The POMONA TERRA COTTA CO., of [illegible]rth Carolina, will furnish the piping, at [illegible]171.

PENSACOLA, FLA.—Bids are asked until noon, April 16, for constructing 43 miles of brick, cast iron, terra cotta and concrete sewers and drains. Plans and specifications on file at office of Engineering News, New York. L. Hill Greene, Chn. Bd. Bond Trustees.

Appropriations of $150,000 for street paving and $250,000 for water-works have also been made. Addressing to official information. T. Chalkley Hutton is Consult. Engr. (Advertised, Engineering News.)

TAMPA, FLA.—Board of Public Works has awarded contract for constructing storm sewers throughout the city to R. L. DAVIS, at about $20,000.

NEW ORLEANS, LA.—Bids are asked until noon, March 19, by the Sewerage and Water Board for the construction of about 80 miles of sewers and appurtenances. F. S. Shields, Secy. (Advertised, Engineering News.)

GEORGETOWN, KY.—Bids are asked until 4 p. m., April 11, for about four miles of sewers and appurtenances. D. A. Adams, Clk. John N. Alvord and Chas. B. Burdick, 1207 Hartford Bldg., Chicago, Engrs. (Advertised, Engineering News.)

FINDLAY, O.—Contract for sewer construction has been awarded to JOHN KIRK, at $2,902. J. C. Edie, Clk.

GLENDALE, O.—Bids are asked until noon, March 12, for constructing a sewer on Oak Ave. J. G. Cutting, City Clk.

DAYTON, O.—Bids are asked until March 14 by W. F. Miller, Clk. Bd. Pub. Service, for sewer construction in several streets.

PAINESVILLE, O.—KLEINMANN & BATTLES, of this city, have been awarded contract for construction of new sewers.

INDIANAPOLIS, IND.—The Board of Public Works will soon ask for bids for the construction of an immense sewer in West Indianapolis and Haughville, at an estimated cost of $150,000. Blaine H. Miller is City Engr.

LANSING, MICH.—The city expects to construct sewer extension during the coming season aggregating about $32,000.

DELRAY, MICH.—DETROIT SEWER & PAVING CO. has been awarded the contract to build sewers, at $21,840.

PORT HURON, MICH.—According to official advices from R. D. O'Keefe, Supt. Pub. Wks., the report that 25,000 ft. of sewers would be constructed this spring is incorrect.

GENESEO, ILL.—WEBSTER BROS., of Shelbyville, Ill., have been awarded the contract for construction of the new sewer here.

JOLIET, ILL.—The construction of a sewer and water main on Ottawa St. will be begun as soon as the weather permits. H. A. Stevens is City Engr.

LIBERTYVILLE, ILL.—Bids are asked until March 9 for the construction of a sewerage plant and outlet sewer. James Anderson is City Engr.

TOMAH, WIS.—This place is considering the construction of a new sewer system.

DES MOINES, IA.—Bids are asked until 11 a. m., March 10, by Bd. Pub. Works, for sewerage in various streets. J. W. Campbell, Clk.

NORFOLK, NEB.—City has voted to issue $42,000 of bonds for the construction of new sewers.

BRENHAM, TEX.—NESBETT & MEYERS have been awarded the contract for construction of sewers here.

OKLAHOMA CITY, OKLA.—Contracts have been awarded for valves, hydrants and pipes for the repair of the sewerage system, as follows: W. W. CORY, St. Louis, valves and hydrants, $9,440; UNITED STATES CAST-IRON CO., St. Louis, pipes, $9,650.

BOULDER, COLO.—We are officially informed that city will build brick or reinforced concrete sewers at an estimated cost of $28,000. A. C. Schultz is City Engr.

SPOKANE, WASH.—Plans for an immense sewer district in the southeast part of the city have been completed by the city engineer's office. It will extend over most of the territory between the river and Eighth Ave., and to the eastern city limits. Estimated cost is $300,000.

FRESNO, CAL.—Bids are asked until March 19 for sewerage construction. W. H. Ryan is City Clk.

BERKELEY, CAL.—The contract for constructing sewer in Third St. has been awarded to the EAST SHORE IMPROVEMENT CO. C. S. Merrill, Clk.

VACAVILLE, CAL.—City has authorized an issue of bonds for $25,000 for the construction of a sewer system.

TORONTO, ONT.—The provincial board of health has approved plans for a septic tank sewerage system and contracts will probably be let in the near future. Estimated cost is $2,385,000.

GARBAGE DISPOSAL.

The names of parties awarded contracts are printed in capital letters.

NEW YORK, N. Y.—Bids are asked until noon, March 14, for furnishing twelve watering trucks, by J. McG. Woodbury, Comr. of Street Cleaning.

Bids are asked until noon, March 14, by J. McG. Woodbury, Comr. of Street Cleaning, for 27 sweeping machines.

COLUMBUS, O.—Plans have been submitted to the Board of Public Service by Hering & Fuller, Engrs., of New York, for a garbage disposal plant, and an ordinance has been prepared for introduction in Council providing for an issue of $290,000 bonds to cover the entire building and equipment of plant, purchase of horses, wagons, machinery, etc.

ROCKFORD, ILL.—It is reported that the National Garbage Fuel Co. has bid for the disposal of the city's garbage and will erect a $28,000 plant if awarded the contract.

OCEAN PARK, CAL.—Bids for the construction of a garbage disposal plant have been received. The prices ranged from $7,300 to $10,000 ,and it is thought the low bidder will be awarded contract in a few days.

OTTAWA, ONT.—Contract for collection and disposal of the city garbage has been awarded JAS. KENNEDY, at $17,500 per year on a five-year contract.

STREETS AND ROADS.

The names of parties awarded contracts are printed in capital letters.

PORT WASHINGTON (L. I.), N. Y.—We are officially informed that the ABBOT-GAMBLE CO., 32 Broadway, N. Y., has been awarded the contract to construct roads on the private estate of Wm. Guggenheim.

NEW YORK, N. Y.—Bids for various street improvements have been received at the office of Louis F. Haffen, Pres. Boro. Bronx. The low bidders were: Joseph E. Conklin, 135 Front St., for 20,000 cu. yds. trap rock at $32,000; Frank P. Dursie, for improvements in Kelly St., at $9,795; Geo. I. Bailey, 1144 Fulton Ave., for improvements in Echo Pl., at $5,489; P. J. Kane, 930 E. 150th St., for improvements in W. 170th St., at $6,348; Asphalt Construction Co., for paving Lafontaine Ave. at $12,624; A. T. McGuiness, 1568 Third Ave., for improvements in 169th St., at $29,439.

The following bids have been received at the office of Louis F. Haffen, Pres. Boro. Bronx, for regulating and grading Hunt's Point Road from Southern Boulevard to East River: Atlanta Construction Co., $87,334; W. F. Murray, 1155 Boston Road, $71,393; Frank Falk, 237 Old Broadway, $67,531; Geo. L. Brown, 613 W. 146th St., $77,710; C. W. Collins, Fordham Road and Morris Ave., $74,220; J. C. Rodgers, Jr., 1909 Amsterdam Ave., $75,790; A. G. Vermillye, 765 Tremont Ave., $74,682.

NEW YORK, N. Y.—Bids are asked until noon, March 13, by George Cromwell, Pres. Richmond Boro., for grading and regulating Nicholas St. and for furnishing 29,000 tons of broken stone, cement, brick, sand, etc.

Bids are asked until 11 a. m., March 15, by Louis F. Haffen, Pres. Bronx Boro., for grading and improving Bathgate Ave.

Board of Estimate and Apportionment has authorized the expenditure of $1,500,000 for street paving in Brooklyn.

ALTOONA, PA.—We are officially informed that the city will spend nearly $300,000 for new paving in the near future. Harvey Linton, City Engr.

BALTIMORE, MD.—The following contracts have been awarded for the construction of St. Paul St. boulevard by the Board of Awards: PATRICK REDDINGTON, grading 18,000 cu. yds. earth, at 43 cts. per cu. yd.; DANIEL SULLIVAN, paving, at 81 cts. per sq. yd., material to be macadam, with alternate proposition of concrete or vitrified brick gutters. The crushed stone bids were rejected, and the City Engineer has been authorized to purchase stone in the open market. Contracts for supplies were divided among BERRY & TRACEY, GREENMOUNT IRON MANUFACTURING CO., JAMES J. LACEY CO., WILCOX IRON & HARDWARE CO., BOLTON BROS., JOHN W. RUSSELL, JOHN BROWN & SONS, KERWAN-ROBIRDS SUPPLY CO., and the BALTIMORE FOUNDRY CO. B. T. Fendalls City Engr.

The Board of Awards has approved specifications for paving and grading Park Ave., Mosher St., and Collington Ave. with asphalt block.

WASHINGTON, D. C.—The Commissioners of the District of Columbia have issued orders for paving a number of streets at a total cost of $36,500.

PORTSMOUTH, VA.—City will probably pave three streets at an estimated cost of $35,000 to $40,000.

PETERSBURG, VA.—THE SOUTHERN CONSTRUCTION CO., of Norfolk, has received contract for the paving of the sidewalks of a number of streets with granolithic pavement, at about $30,000.

MARSHALL, N. C.—It is planned to lay about 2,600 sq. yds. of pavement and 400 lin. ft. of curbing immediately. According to official information bonds have been issued and a water-works and sewer system will be built as soon as they are sold. Dr. W. J. Weaver is Treas. Bd. Pub. Improvements.

ENSLEY, ALA.—James & W. H. Zuber has been awarded the contract to grade street and construct sidewalks on the property of the Shadyside Land Co.

VICKSBURG, MISS.—We are officially informed that it is planned to pave Washington St. with vitrified brick. James M. Searles is City Engr.

LAKE CHARLES, LA.—According to press reports this city has planned for 26,000 yds. of paving and will ask for bids immediately.

ALEXANDRIA, LA.—Bids are asked until 7.30 p. m., March 20, by the Board of Aldermen, for paving, curbing and laying sidewalks on several streets. E. F. Hunter, City Clk.

MEMPHIS, TENN.—Bids are asked until noon, March 10, by the Engineering Department for paving blocks, granite curbing, cement, gravel, asphalt, paving bricks, macadam, pipe and other material for street work and for paving several streets. Ennis M. Douglass is City Register.

CANTON, O.—Bids are asked until March 12, by the Board of Public Service for paving Walnut St. with brick block. C. A. Zellers, Clk.

DAYTON, O.—Bids are asked until noon, March 14, for paving and curbing alleys. Wm. F. Miller, Clk. Bd. Pub. Service.

BLUFFTON, O.—It is proposed to pave Main St. for about one mile with vitrified block at an estimated cost of $60,000.

YOUNGSTOWN, O.—Plans have been completed for paving and curbing nine streets, and it is said bids will be asked immediately.

ELYRIA, O.—Contract has been awarded by the OHIO ENGINEERING CO. for paving Chestnut St. with brick, at $8,105.

DELAWARE, O.—Bids are asked until March 19, by the Board of Public Service, for grading, curbing and macadamizing Oak St. F. D. King, Clk.

ROCKFORD, O.—We are officially informed that Charles M. Smith, C. E., has been appointed to prepare plans and specifications for paving and curbing Main St.

MOROCCO, IND.—The commissioners of Newton County will soon ask for bids for the construction of 30 miles of gravel roads.

MADISON, IND.—Bids are asked until 10 a. m., March 8, for 3,352 ft. of macadam roads. C. F. Crozier, is Auditor.

AUBURN, IND.—It is said that bids will be asked after April 1 for paving Eighth and Ninth Sts. with asphalt. F. R. McDowell is City Engr.

INDIANAPOLIS, IND.—It is said that the Board of Public Works will soon ask for bids for paving, grading and graveling in several streets and alleys. Blaine H. Miller is City Engr.

BRAZIL, IND.—It is reported that the commissioners of Clay County are preparing to ask for bids for about two miles of gravel roads. J. F. Smith is Auditor.

INDIANAPOLIS, IND.—It is said that plans have been prepared by the commissioners of Marion County for improving all the gravel roads in the county and bids will be asked in the near future.

GOSHEN, IND.—It is reported that Main St. is to be paved with brick for a distance of 4,400 ft. John L. Cooper is City Engr.

HOLLAND, MICH.—Bids are asked until 7.30 p. m., March 14, by W. O. Van Eyck, City Clk., for paving River St. James Price is City Surv.

MARQUETTE, MICH.—BLOME & CO., of Chicago, and BYERS & CO., of Houghton, Mich., have been awarded contract for paving streets and constructing sidewalks at Red Jacket. H. Clausen is Village Engr.

SAGINAW, MICH.—It is said that many of the streets of this city will be paved during the year at a total cost of about $140,000. Asphalt, brick and bitulithic macadam will be used.

GRAND RAPIDS, MICH.—Bids are asked until 2 p. m., March 25, for grading and paving several streets with brick. S. A. Freshney, Secy. Bd. Pub. Wks. L. W. Anderson, City Engr. (Advertised, Engineering News.)

PONTIAC, MICH.—CLANCEY & ROSS, contractors, of this city have been awarded a big contract for paving. Logan block will be used on concrete and the price will be $1.56 per sq. yd.

FLINT, MICH.—The contract to pave Detroit St. has been awarded the BARBER ASPHALT CO., of Detroit.

PEORIA, ILL.—The MISSOURI CONSTRUCTION CO. has been awarded the contract for grading a road from Peoria to Bloomington, a distance of about 40 miles. The construction company have sublet the contract for grading the new road between East Peoria and Morton to R. W. MARTIN, of Evansville, Ind.; M. McGINTY, of Rock Island, Ill.; and WM. SNOODS, Jr., of Peoria.

WAUKEGAN, ILL.—The board of Local Improvements has awarded the contract for macadamizing South Sheridan Road, Lake, Belvidere and Liberty Sts., in all about a half mile of paving to JAMES CAPE & SONS, of Racine, at $12,388.

EAST ST. LOUIS, ILL.—The council has passed an ordinance for filling Forty-second St., across Pittsburg Lake, a distance of approximately ¾ of a mile. The city engineer's estimate is 70,000 cu. yds. of earth filling; estimated cost, $35,000.

SUPERIOR, WIS.—Bids are asked until March 14, by the Board of Public Works, for 11,300 sq. yds. of macadam paving and 6,800 lin. ft. of curb. We are officially informed that work in several streets is planned and bids for paving will soon be asked. S. M. White is City Engr.

GREEN BAY, WIS.—Bids are asked until April 2 for the construction of about two miles of asphalt paving. W. W. Reed, City Engr. Advertised, Engineering News.

DES MOINES, IA.—Bids are asked until 1 a. m., March 19, for grading West 27th St., by the Board of Public Works. J. W. Campbell, Clk.

OTTUMWA, IA.—It is reported that Fourth, Wappelo and Albany Sts., will be paved with brick. C. R. Allen is City Engr.

DULUTH, MINN.—It is reported that several streets are to be paved with various materials during the year at a total cost of $127,000. Thos. F. McGilvray is City Engr.

SALINA, KAN.—The KANSAS BITULITHIC CO., of Kansas City, Mo., has secured the contract for paving Santa Fe Ave. with Warren bitulithic pavement on bituminous base at $2.10 per sq. yd. for 26,000 sq. yds.; 30 cts. per cu. yd. for excavating, and 50 cts. per lin. ft. for 7,000 ft. cement curb. A. W. Godfrey is City Clk. Noted in issue of Feb. 15.

LAWRENCE, KAN.—HASKINS & RAMSEY, of this city, have been awarded all the paving contracts for the year.

FREMONT, NEB.—It is reported that East 5th St. will be paved at an estimated cost of $31,000.

PINE BLUFF, ARK.—CHARLES F. DUNNINGTON has secured the contract for paving Sixth Ave., from Main to Twelfth Ave., at $22,500.

EL PASO, TEX.—Bids are asked until 5 p. m., March 28, for 90,000 sq. yds. of paving. Geo. C. Wimberley, City Engr.

SHAWNEE, OKLA.—The council has awarded a contract for paving fourteen blocks on South Beard, Philadelphia and Oklahoma Aves., to the OKLAHOMA PAVING & CONSTRUCTION CO., at $2.20 per yd.

LAWTON, OKLA.—E. S. BLESSING, Kewanna, Ind., has been awarded contract for paving the court house square here at $7,884.

PULLMAN, WASH.—O. H. COLFAX has been awarded contract for macadamizing five blocks of streets, at $8,500.

SEATTLE, WASH.—The INDEPENDENT ASPHALT PAVING CO., 602 Bailey Bldg., Seattle, has been awarded contract for paving 15th Ave., at $29,740.

Bids are asked until 2 p. m., March 22, by Board of County Commissioners of King County, for improvements to the Bechteli Road.

YREKA, CAL.—The board of supervisors of Siskiyou County have sold the Little Shasta wagon road bonds, amounting to $52,000, and bids will soon be advertised for the construction of 26 miles of macadamized road at an estimated cost of about $2,000 per mile.

SACRAMENTO, CAL.—JAMES TOUHEY has been awarded contract for macadamizing Y St. levee.

WINNIPEG, MAN.—Bids are asked until 3.30 p. m., March 27, by J. G. Latimer, Chn. Com. on Works, for 300 tons of asphalt. C. J. Brown is City Clk. (Advertised, Engineerings News.)

MANUFACTURING PLANTS.

The names of parties awarded contracts are printed in capital letters.

NEW BEDFORD, MASS.—We are officially advised that the new cotton mill to be erected on Orchard St. will be occupied by the Page Mfg. Co. Three buildings will be erected, mill construction, brick and steel, 516 × 100 ft. and 432 × 151 ft., contract for which has been awarded to B. F. SMITH & CO., Pawtucket, R. I. J. W. Knowles is Treas.

PEABODY, MASS.—COBURN & BOUGHTON, Old South Bldg., Boston, Mass., have been awarded the masonry, and PITMAN & BROWN, Salem, Mass., the carpentry contract for the new factory building at Peabody for A. C. Lawrence Leather Co., South St., Boston.

BROCKTON, MASS.—It is reported that the W. L. Douglas Shoe Co. will erect an addition to its present factory, two-story, 260 × 60 ft.

NEW YORK, N. Y.—S. B. Ogden, Arch., 954 Lexington Ave., is taking figures on a piano factory to be erected at Cypress Ave. and 134th St. for Francis Connor, 4 East 42d St. Building will be brick and stone, 5-story, 50 × 100 ft.

SYRACUSE, N. Y.—West Bros., it is reported, will build an addition to their present plant, three stories, mill construction, 55 × 175 ft.

BROOKLYN, N. Y.—Figures are being taken by F. B. Lefferts, Arch., 27 East 22d St., New York, for a concrete and steel, 6-story building, 75 × 200 ft., to be erected for the Yellow Pine Co., 243 Franklin St., Brooklyn.

JERSEY CITY, N. J.—The American Railway Steel Tie Co. has been incorporated to manufacture steel ties, with offices at 12 Exchange Pl., this city. John G. Snyder, Altoona, Pa., is interested.

BELLEVILLE (post-office Newark), N. J.—Plans are in progress at office of C. G. Jones, Arch, 280 Broadway, for a factory to be located here for the Eastwood Wire & Chemical Mfg. Co. Brick, 2-story, 60 × 125 ft.

CAMDEN, N. J.—J. S. Dunn & Co., 7th and Jefferson Aves., have invited bids for an oil cloth factory at this place. Brick, 3-story, 60 × 120 ft., power equipment and special machinery.

CHESTER, PA.—The Farson Mfg. Co. has awarded a contract to HARRY KROTTER for the construction of a 2-story factory building, 50 × 150 ft.

READING, PA.—Edward B. Scholl, Arch., 540 Court St., is preparing plans for a hosiery mill for S. S. Miller. Building will be 2-story, of slow-burning construction.

AMBRIDGE, PA.—It is reported that the H. K. Porter Co., Farmers' Bank Bldg., Pittsburg, has bought a site at Ambridge, and will move all its works there from Pittsburg. The plants will cost $1,000,000 and will require one year to build. S. L. McHenry is Secy.

LITITZ, PA.—The Ideal Cocoa & Chocolate Co. will have plans prepared for an addition to their present plant. Building will be of slow-burning construction, 4-story, 50 × 150 ft.

PHILADELPHIA, PA.—Savery & Scheetz, Archs., Stephen Girard Bldg., have invited bids for a 2-story brick factory building to be erected at 346 East Walnut Lane.

CONSHOHOCKEN, PA.—The Longmead Iron Co. is having plans prepared for an addition to its foundry at this place. Brick and steel, 1-story. New equipment will be installed.

BALTIMORE, MD.—Parker & Thomas, Archs., Union Trust Bldg., are preparing plans for a building for the C. A. Gambrill Mfg. Co. Brick and stone, five stories.

BALTIMORE, MD.—Charles M. Anderson, Arch., 324 North Charles St., writes us that he contemplates the construction of a plant for grinding cork bark.

It is reported that Friedenwald Bros., machinists, 214-218 North Holliday St., have commissioned C. M. Anderson, Arch., 324 North Charles St., to prepare plans and

specifications for the construction of an addition to its plant. Two stories, 57 × 100 ft.

It is reported that the Dix Mfg. Co. has purchased a site, and will erect a 2-story factory building, 65 × 165 ft.

WASHINGTON, D. C.—Ernest Bergdorf, 410 Eighth St., N. W., will have plans prepared for a 5-story, brick, stone and steel, fireproof carriage repository, 100 × 25 ft., to be erected at the above address.

CONCORD, N. C.—Stuart W. Cramer, Charlotte, N. C., is reported to be Engr.-in-Charge of construction of an addition to the plant of the Gibson Mfg. Co. Contract for machinery has been let and contract for building will be let shortly.

HENDERSON, N. C.—The Harriett Cotton Mills are considering the addition of 5,000 spindles to their present plant, it is reported.

ROCKINGHAM, N. C.—Robert L. Steele and associates will organize a company to erect a cotton mill here, with an equipment of 10,000 spindles and 300 looms.

CHARLOTTE, N. C.—The Harris Mfg. Co. has been incorporated, with a capital of $100,000, and construction of a plant for manufacturing yarns will be started shortly. David Clark is Treas. and Mgr.

GREENVILLE, S. C.—Lockwood, Greene & Co., 93 Federal St., Boston, Mass., are reported to be Engrs.-in-Charge of improvements to be made to the plant of the McGee Mfg. Co.

PENDLETON, S. C.—The Pendleton Cotton Mills are reported to have been reorganized and will increase the capital stock for purpose of adding machinery, probably to increase present equipment from 3,136 to 10,000 spindles. The plant manufactures yarns. D. P. McBrayer, of Anderson, S. C., is Pres.

WAYCROSS, GA.—The PENN BRIDGE CO., Beaver Falls, Pa., has been awarded contract for grading, sewerage, water supply, brick and steel buildings and all other work in connection with constructing new locomotive works and car shops at Waycross, Ga., for the Atlantic Coast Line, except machinery and equipment. Plant will include a roundhouse, oil house, storehouse, machine and erecting shop, blacksmith shop, coach shop, paint shop, planing mill, foundry, pattern storehouse, dry kiln and frame freight car repair shop. Proposals submitted were for plant complete, except machinery and equipment. Contract is about $400,000. R. E. Smith, Gen. Supt. Motive Power, Wilmington, N. C. (Advertised in Engineering News, from Jan. 4 to Jan. 18.)

TOWNSEND, TENN.—The mills of the Townsend Co., recently destroyed by fire to the extent of $60,000, will be rebuilt at once.

CHATTANOOGA, TENN.—The Machove Mills Co., capital $1,500,000, has been organized to erect a cotton mill near here. Lavins M. Thomas, Battle McLester, Charles W. Rankin, J. H. Thomas and T. T. Rankin are incorporators.

CHATTANOOGA, TENN.—O. D. Cornell, E. D. Bixby and C. E. Burrell, paper manufacturers, Kalamazoo, Mich., are reported to have purchased a tract of land here for the purpose of erecting a paper plant. The water of the river will be used together with pulp from rags and soft woods. A filtering plant will be erected for the purpose of filtering the water. The mill will cost about $150,000.

LOUISVILLE, KY.—The Central Concrete & Construction Co., capital $25,000, has been chartered here, according to reports, to erect a plant for the manufacture of concrete construction blocks. Robert C. Morris is Pres., and C. J. Meddis, Secy.

COLUMBUS, O.—C. J. CLOSE has been awarded the contract for erecting the new grinding building for the Jeffrey Mfg. Co., it is reported. Cost, about $10,000.

YOUNGSTOWN, O.—It is reported that the Shenango Iron & Steel Co. is to spend $500,000 in the erection of a blast furnace and additional puddle mills.

PORTSMOUTH, O.—The Irving Drew Co. contemplates the expenditure of about $50,000 for additions to its present shoe manufacturing plant.

RICHMOND, IND.—The Practical Mfg. Co. will erect a large plant in this city to manufacture boilers and boiler supplies. E. H. Erk, E. O. Silbey and R. H. Fetta are directors.

FORT WAYNE, IND.—The Fort Wayne Brick & Tile Co. will receive bids for the construction of a brick and tile factory here.

PLAINWELL, MICH.—The Michigan Paper Co., of Plainwell, has awarded the contract for the erection of a paper mill to HAUSER, OWEN & AMES, of Grand Rapids, Mich., at about $200,000. The contract calls for everything except the purchase and installation of the machinery. Construction will be brick with concrete foundations.

HAWTHORNE, ILL.—The Western Electric Co., 259 South Clinton St., Chicago, is about to let contracts for a manufacturing building at Hawthorne, according to reports. It will be five stories, 275 × 375 ft., built of brick and steel, with composition roof. $700,000 is estimated cost.

CHICAGO, ILL.—WILLIAM M. CRILLY, 167 Dearborn St., is reported to have been awarded general contract for a car shop building, to be erected at 78th St. and Wentworth Ave. for the Chicago City Railway Co. To be 1-story, 290 × 257 ft., built of brick, mill and fireproof construction. Estimated cost, $100,000.

CHICAGO, ILL.—L. G. Hallberg, Arch., 84 La Salle St., is reported to have let the masonry and carpentry contracts to H. J. ERICKSON, 84 La Salle St., for a factory to be built at Crossbey and Hobby Sts., for the Willer Co. It will be 5-story, 75 × 126 ft., of concrete construction, and cost about $100,000.

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The readers of ENGINEERING NEWS are constantly in the market for great quantities of machinery, tools and general supplies. While our thousand advertisers are usually able to furnish the material desired, yet there are many things wanted by our readers that are not advertised, although connected with engineering and contracting directly or indirectly. This department (R-W) is for this class of inquiries, and we urge our readers to keep us informed. Enclose five cents in stamps and we write to a number of leading manufacturers without further cost. When writing to our advertisers, who are the leaders in their respective lines, **mention Engineering News.** Have you a copy of our Buyers' Guide? **Engineering News Can Help Buyers.**

SCRAP MICA.—Middletown, Conn.—C. H. Blatchley writes us that he wants names of firms handling scrap mica, and also information regarding the value and the use of the same.

SAND TESTING MACHINES.—Cape May, N. J.—The Cape May Real Estate Co., Chas. W. Tarr, Res. Engr., writes us that he wants prices on apparatus for testing sands and gravels mechanically.

CEMENT BUILDING BLOCK MACHINES.—Miami, Fla.—We are informed that H. L. Whitney, of Beverly, Mass., and Jas. Meek, of Miami, Fla., are in the market for the above, including plant equipment.

SIDEWALK TOOLS, BRASS PLATES FOR CEMENT WALKS, ETC.—Schenectady, N. Y.—V. C. Scott & Co., 114 South Centre St., write us that they want the addresses of makers of tools for making cement sidewalks, and also of makers of brass plates to be imbedded in cement walks.

POWDER, DYNAMITE, ETC.—Mexico.—C. K. Cole, Bocogna, Chih., Mex., writes us that he wants the addresses of makers of black powder, dynamite, caps, fuse, etc., delivered in carload lots at El Paso, Tex.

MACHINES FOR TREATING NUTS, OIL, ETC.—Mexico City, Mex.—W. D. Hansen, Ramon Guzman 1628, c/o Walsh, Mexico City, writes us that he is in the market for a machine for treating palm nuts, crackers, oil press, etc.

BRICK SIDEWALKS.—Ridgway, Pa.—Information is wanted regarding garden sidewalks, built of brick with a cinder foundation, and resting on a cushion of sand, and a terrace walk adjoining the garden, which widens out and forms the floor of a pavilion, is intended to be laid on a concrete foundation. Correspondence is wanted with firms that do this class of work, etc. Address A. S. De Forest, Landscape Arch., 223 Sibley Bldg., Rochester, N. Y.

MILWAUKEE, WIS.—The J. A. & P. E. Dutcher Co. has let to MEREDITH BROS. a contract to build a 12-ton open hearth steel furnace. This work together with new buildings made necessary by the extension will cost from $50,000 to $75,000, according to reports.

SOUTH OMAHA, NEB.—It is stated that $1,000,000 will be expended by the National Packing Co. in remodeling its packing plant here.

TULSA, IND. T.—The National Drill & Mfg. Co. is reported to be about to concentrate its plants now located at Barberton, O., and Coffeyville, Kan., including headquarters, in Tulsa. The local plant has been in operation for about a year and the concentration of all branches here will necessitate enlarging it to three times the present capacity and will represent when running full capacity an investment of $100,000.

NORTH YAKIMA, WASH.—C. B. Bussell and Andrew Weber, of Seattle, are contemplating building a cannery here, to cost about $25,000.

SEATTLE, WASH.—C. E. Farnsworth, Pres. of the Union Machinery & Supply Co., has purchased the Challoner-Perkins plant in this city, and has arranged for building a large plant at cost of $100,000, to be in operation within three months.

MISCELLANEOUS CONTRACTS.

The names of parties awarded contracts are printed in capital letters.

CONCRETE BLOCK MACHINERY.—Bristol, R. I.—L. H. Callan, general contractor, 208 Franklin St., informs us that he is in the market for concrete block machinery.

DITCH.—Centerville, Ia.—Bids are asked until March 19 by R. J. Baker, County Audr., for constructing a ditch in Drainage Dist. No. 1, requiring 217,199 cu. yds. Probable cost, $22,000.

DITCH.—Muscatine, Ia.—Bids are asked until 9 a. m., April 2, for the construction of a ditch in Drainage Dist. No. 2, involving the excavation of about 63,500 cu. yds. A. S. Lawrence, County Audr.

BREAKWATER.—Cleveland, O.—Specifications are on file at office of Engineering News, New York, for the construction of a breakwater at Conneaut Harbor, O. Bids are asked until March 16, as noted on March 1.

DRAIN.—Knoxville, Ia.—Bids will be received until March 28 by the Board County Supervisors for constructing an open drain in Drainage Dist. No 1, Swan Township, requiring 41,000 cu. yds. Walter Bane, County Audr.

DITCH, Albert Lea, Minn.—The contract for constructing the Nelson ditch in Hayward was awarded by the County Auditor to CALLAHAN & CO., Omaha, Neb., at 11¾ cts. per cu. ft. of earth removed, the total amounting to $25,058.

DRAIN.—Eldora, Ia.—We are officially advised that bids are asked until April 2, 1 p. m., for construction of a drain over three miles long. No bids were received in response to call for bids on Feb. 6. Jay S. Newcomer is County Audr.

DREDGING.—Washington, D. C.—Bids will be received until April 4 by Capt. Spencer Crosby, Corps. Engrs., U. S. A., Washington, for dredging in Breton Bay, Md., and in Mattaponi and Pamunkey Rivers and Accoquan and Carters Creeks, Va.

BULKHEADS, ETC.—Baltimore, Md.—It is reported that bids are asked until March 9 by the Board of Awards, E. Clay Timanus, Pres., for constructing stone and timber bulkheads in the Back Basin; also for dredging. M. H. Hutton is Harbor Engr.

LOCK GATES.—Pittsburg, Pa.—Bids are asked until noon, March 30, for building five pairs of lock gates and anchorages. Major Wm. L. Sibert, Engrs., as advertised in Engineering News. Specifications and bidding sheet are on file at office of Engineering News, New York.

DITCH, RESERVOIR.—Lewiston, Idaho.—Specifications and bidding sheet for ditch, etc., to be built by the Waha-Lewiston Land & Water Co., are one file at office of Engineering News, New York. Bids are asked until March 31, as advertised in Engineering News from March 1 to March 29.

CEMENT.—Glendive, Mont.—Bids are asked until 10 a. m., April 12, for furnishing from 8,000 to 12,500 bbls. of Portland cement, f. o. b. cars at bidder's mill. Specifications are on file at office of Engineering News, New York, for this material. E. A. Hitchcock, Secy., Dept. Interior, Washington, D. C.

FIRE ALARM SYSTEM.—Norfolk, Va.—The Bureau of Yards and Docks, Navy Dept., Washington, has awarded to the GAMEWELL FIRE ALARM TELEGRAPH CO., 19 Barclay St., New York, contract for the fire alarm system at the Norfolk Navy Yard at $7,996. Bids were opened Feb. 10.

DOCKS.—Suffolk, Va.—Virginia & Carolina Coast R. R.—The JARRETT CONSTRUCTION CO., Springfield, Mo., has been awarded the contract for constructing all docks in connection with the construction of the Virginia & Carolina Coast R. R., to be constructed from Suffolk, Va., southerly for 123 miles.

RAILROAD TRACK SCALE.—Portsmouth, N. H.—Bids are asked until 11 a. m., April 7 for furnishing a 100-ton railroad scale at the navy yard, Portsmouth, N. H. Mordecai T. Endicott, Ch. Bureau Yards and Docks, Navy Dept., Washington, D. C. Specifications for this work are on file at office of Engineering News, New York.

CANAL.—Oregon.—We are officially informed by J. W. Piercy, Secy. of the Gold Hill Canal Co., 825 Law Bldg., Indianapolis, Ind., that estimated cost of proposed canal, for which bids are advertised in Engineering News until March 15, will be about $350,000, based on hand labor. There will be about 1,136,000 cu. yds. of excavation. Fully noted on Feb. 8.

TRAP ROCK, ETC.—Brooklyn, N. Y.—Bids are asked until 11 a. m., March 14 by Bird S. Coler, Boro. Pres., for furnishing and delivering about 21,073 cu. yds. broken trap rock, 8,359 cu. yds. trap screenings, 6,000 lin. ft. bluestone curb, 30,000 sq. ft. bluestone flagstone, 150,000 lbs. paving pitch, 1,000 bbls. Portland cement, 6,500 cu. yds. sand, etc.

MAIN CANAL.—Boise, Idaho.—Bids are asked until 2 p. m., April 16, for the construction of about 20 miles of main canal, involving the excavation of about 975,000 cu. yds. earth and 10,000 cu. yds. solid rock in connection with the Payette-Boise Project, Idaho. E. A. Hitchcock, Secy. Dept. Interior, Washington, D. C. (Advertised, Engineering News.)

CEMENT.—Iola, Kan.—The Secretary of the Interior, on Feb. 27, awarded contract to the McPHEE & McGINNITY CO., of Denver, Colo., for 30,000 bbls., more or less, of Portland cement for the Uncompahgre Valley Project, Colorado. The bid of the contractors is $1.43 per bbl. f. o. b. cars at Iola, Kan. The formal contract and bond for execution have been forwarded to the contractors for signature.

DREDGING.—Boston, Mass. — Bids are asked until 2 p. m., March 15, for dredging a channel about 7,800 ft. long, 50 ft. wide, and six ft. deep at mean low water in Annisquam River, between Gloucester Harbor and Wolf Hill, with about 195 ft. of seawall and riprap at its southerly end. Woodward Emery, George E. Smith and Henry J. Skeffington, are Harbor and Land Comrs. (Advertised, Engineering News.)

DAM.—Carlsbad, N. Mex.—Bids are asked until 2 p. m., April 12, for construction of a dam in Pecos River, involving the placing of 75,000 cu. yds. of earth; 40,000 cu. yds. of rock fill; 12,000 lin. ft. of steel sheet piling; 3,300 cu. yds. of rubble concrete and about 219,000 lbs. of steel, in connection with the Carlsbad Project, New Mexico. E. A. Hitchcock, Secy. Dept. Interior, Washington, D. C. (Advertised, Engineering News.)

DREDGING.—Galveston, Tex.—Bids for the filling of the Fort Crockett reservation from 45th to 53d Sts., and the dredging of Div. 3 of the Buffalo Bayou, were opened Feb. 23 by Capt. Edgar Jadwin, U. S. Engr. The North American Dredging Co., of San Francisco, was the lowest bidder on the Fort Crockett project, submitting a price of 22 99-100 cts. per cu. yd, or $286,225. The lowest bid on the Buffalo Bayou project was 19 9-10 cts. per cu. yd., or $457,750. It was submitted by August Nelson, representing the Atlantic, Gulf and Pacific Co., of New York.

MAIN CANAL.—Glendive, Mont.—Bids are asked until 10 a. m., April 12, for the construction of structures on the main canal and laterals, Lower Yellowstone Project, Montana and North Dakota, involving approximately 150,000 cu. yds. of excavation; 7,000 cu. yds. of concrete; 7,0[illegible] yds. riprap; 550,000 lbs. of square [illegible] 80,000 ft. B. M. of sheet piles; 4[illegible] ft. B. M. of lumber, and 8,000 lin. ft [illegible] in 24-in. terra cotta pipe. Frank [illegible] Weymouth, Engr., Glendive. E. A. [illegible] Secy. Dept. Interior, Washington, D. C. (Advertised, Engineering News.)

BLASTING LEDGE.—Portsmouth, N. H.—Bids were received by the [illegible] of Yards and Docks, Navy Dept., for [illegible] ting in front of quay wall, Navy Yard, Portsmouth, N. H., on March 3: Johnston [illegible] Lewes, Del., Item No. 2, $10.65 per [illegible] Item No. 3, $1.25 per cu. yd.; John [illegible] Patrick, 29 Hamilton St., Plattsburg, [illegible] Item No. 2, $9.49 per cu. yd.; Item [illegible] per cu. yd. R. G. Packard [illegible] Pearl St., New York, N. Y., Item No. [illegible] $120,000; John H. Gerrish, 247 Atlantic Ave., Boston, Mass., Item No. 1, $164,855; Item [illegible] $10.50 per cu. yd.; Item No. 3, 90 cts. per cu. yd.; Item No. 4, $154,030.

SUPPLIES.—Washington.—Bids were opened March 6 at the Bureau of Supplies and Accounts, Navy Dept., Washington, D. C., for miscellaneous [illegible] for the various navy yards. The [illegible] of interest to engineers are as follows: [illegible] one of lowest bidder alone is given.) Ten side dump cars, J. J. Shannon & Co., [illegible] more, $1,421; two steam drop hammers, [illegible] lbs., Manning, Maxwell & Moore, New York, $2,200; two steam drop hammers, [illegible] lbs., Manning Maxwell & Moore, $[illegible]; one trimming press, 4-in. stroke, [illegible] Machinery Agency, Manchester, N. H., $1,169; one forging machine, 4 in., Ajax [illegible] Co., Cleveland, O., $7,025; one heading [illegible] upsetting and forging machine, Ajax Mfg. Co., $1,825; two vertical milling machines, Garvin Mch. Co., New York, $1,000; two heating furnaces, 9 ins. × 14 ins., Garvin Mch. Co., $1,996.

TUNNEL.—Boston, Mass.—Bids were received on March 6, at the office of the Boston Transit Commission, [illegible] Beacon St., Boston, Mass., for constructing Section Eight of the Washington St. tunnel, Boston, as follows: Bruno, Salamone & Petitti, $713,965; Cranford Company, Brooklyn, $428,067; W. H. Keyes & Co., $389,782; Fred S. & A. D. Gore, $386,925; Metropolitan Const. Co., $343,170; Hugh Nawn Const. Co., $340,195; Chas. R. Gow Co., $321,205; Coleman Bros., $317,747; Seeley, Taylor Co., $314,020; Patrick McGovern, $310,267; Jas. J. Coughlin Const. Co., 19 Worthington St., Roxbury, Mass., $297,641. All contractors are local firms unless otherwise noted. Steel: Eastern Bridge and Structural Co., $33,435; Belmont Iron Works, Pennsylvania, $32,620; L. P. Shoemaker & Co., Pennsylvania, $30,618; W. C. Clark & Co., Boston, $30,523; Berlin Const. Co., Berlin, Conn., $30,150; American Bridge Co., Boston, $29,880; New England Structural Co., Boston, $28,575; Boston Bridge Works, 47 Winter St., Boston, $28,102.

FOREIGN CONTRACTS.

(To insure prompt attention, letters upon consular business should be addressed to the American Consul at ———, ——— Such letters are opened and attended to by the person who happens to be in charge of the office. If addressed to the consul by name they are forwarded to him unopened if he should be absent, and a delay thus intervenes; if he should in the meantime have gone out of office they may wholly escape attention.)

ELECTRIC LIGHTING PLANT.—Roumania.—Bids will be invited soon for the installation of an electric lighting system at Giurgevo, a river port 40 miles south of Bucharest. Est. cost, $190,000.

ELECTRIC RAILWAYS.—Italy.—The municipal authorities of Milan will construct and operate two electric railway lines in Milan. The municipality of Mestre also will build and operate a street railway line.

CANAL.—Bulgaria.—It is reported that bids will be received soon by the Minister of War, at Sofia, Bulgaria, for the construction of a canal between Devna Lake and Varna, a seaport on the Black Sea. Est. cost, $250,000.

HARBOR IMPROVEMENTS.—Japan.—It is probable that large quantities of cement will be required if the government decides to improve its ports and harbors. Huntington Wilson is Secy to U. S. Legation, at Tokyo.

ELECTRIC RAILWAY.—Argentine Republic.—The city of La Plata has granted a concession to Messrs. Ganduffo & Co. for an electric tramway from Barracas bridge to La Plata and the docks, passing through Guilmes, Florencio Varela and Villa Elisa.

WATER SUPPLY.—Aberdeen, Scotland.—A new source of water supply for this city, at an estimated cost of £835,000 ($4,058,100), is under consideration. The River Avon probably will be selected a s the source. William Dyack is Burgh Surveyor and Water Engr.

RAILWAY.—China.—The "North China Herald" on Jan. 12 announced that the Canton Board of Commerce and the Viceroy of Canton have approved plan to build a railway between Nanhsiung and Canton. Julius G. Lay is U. S. Consul-General, at Canton.

TELEGRAPH LINES.—Paraguay.—The government has decreased the inversion of $400,000 in monthly quotas of $40,000 for repairing the North and South telegraph lines, and for the acquisition of instruments. Edward C. O'Brien is U. S. Envoy, at Montevideo, Uruguay.

RAILWAY.—Argentine Republic.—A commission, with Jórgé Casaffouth, of Buenos Aires, as Pres., has been authorized by the government to make surveys for a railway from a convenient point in the Valle de Lerma to Huitiquina or some other point near the Chilian frontier.

RAILWAY EXTENSIONS.—Argentine Republic.—It is announced that the government has decided on the construction of railway lines to various points which will form part of the state railway system. Dr. Adolfo F. Orma is Minister of Public Works (Ministro de Obras Publicas), at Buenos Aires. Charles D. White is Secy. to U. S. Legation, at Buenos Aires.

ELECTRIC PLANT.—Italy.—The Bulletin issued by the French Chamber of Commerce states that "a hydro-electric installation is planned at a cost of about $3,500,000, for the production of 20,000 HP., to be utilized in the Milan district. In addition, the water derived will serve for irrigation purposes.

RAILWAYS.—France.—The Board of the Paris, Lyons & Mediterranean Ry. Co. has authorized the establishment of a second line, (1) between [illegible]opeau and Amplepins; (2) between Tarare and Arbresie. Estimated cost, 3,064,450 francs. M. Berton is Engr.-in-Chief of construction, 88, rue St. Lazare, Paris.

RAILWAY.—Bolivia.—The Bolivian Government has voted the funds for the construction of the railway from Tupiza to Potosi, and as soon as the negotiations are completed with reference to the section La Guiaca to Tupiza (extension of the Central North Railway), work will be at once commenced.

TELEGRAPH MATERIAL.—Peru. — The government will spend about $5,000 during each of the years 1906-1907 on the construction of a telegraph line to connect Puquio (Province of Lucanas) and Coracora (Province of Parinacochas) with Nazca (Department of Ica). Richard R. Neill is Secy. of U. S. Legation, at Lima, Peru.

HIPPODROME.—London, England.—Frederic W. Thompson, of Thompson & Dundy, proprietors of the Hipprodome in New York City, has announced that this firm has obtained an option on a site on Oxford St., London, for a large hipprodrome in London. The office of Thompson & Dundy is at Sixth Ave. and 43d St., New York.

DRY-DOCK.—South Australia.—A company has been formed to construct a dry-dock at Port Adelaide. The proposed work will be constructed almost entirely of timber in preference to concrete. It is understood that the required capital has already been nearly subscribed. The secretary of the company is W. John Creswell, Waymouth St., Adelaide.

TELEGRAPH LINE.—Argentine Republic.—The La Plata Government has authorized the United River Plate Telephone Co. to extend its lines from General Pueyrredon to General Avarado, from Chascomus to Dolores, from Dolores to General Paz and Belgrano, from Bahia Blanca to Medanos, General Pueyrredon, Balcarce, Loberia and Necochea, a total of about 250 miles, to be completed within five years.

BRIDGES.—Argentine Republic.—The plans of the Southern Railway Co. for a swing bridge over the Riachuelo on the high level have received official approval.

The government has ordered the Ways of Communication Department to ask European and North American bridge constructing firms for bids on plans and estimates for the construction of a bridge, with a swing section, on the River Corrientes.

REFUSE DESTRUCTOR. — Transvaal. — Bids are asked by the municipality of Pretoria for the supply and erection of a refuse destructor capable of treating 60 tons daily. Particulars can be obtained from Mosenthal, Sons & Co., 72 Basinghall St., E. C. A copy of the general conditions and specification may be seen at the Commercial Intelligence Branch of the Board of Trade, 73 Basinghall St., E. C., London, England.

STEEL.—Japan.—The Philadelphia "Public Ledger" states that the Japanese Government has contracted with the AMERICAN BRIDGE CO., 42 Broadway, New York City, for 150,000 tons of fabricated steel, to be used in building railway bridges in Korea and Japan. "A greater part of this material will be turned out at the bridge company's Pencoyd and Ambridge plants, and several months will be required for its production."

PORT IMPROVEMENT WORKS.—Spain.—Bids were advertised to be received on March 6 by the Directorate General of Public Works, Madrid, for carrying out improvement works at the port of San Esteban de Pravia, at the estimated cost of 8,404,571 pesetas (about $1,500,000), in accordance with plans, etc., on view at the above-mentioned office and at the office of the Civil Governor of Oviedo. A deposit of 170,000 pesetas (about $32,000) was required to qualify any bid.

RAILWAY RAILS.—Turkey.—The administration of the Hedjaz Railway, Constantinople, it is reported, will let contract for 13,000 tons of steel rails. In connection with the building of this railway from Damascus to Mecca, the government intends to establish big engineering works, probably at Damascus. The road is now completed for a distance of 733 kilometers and surveyed to a point 950 kilometers from Damascus, more than half way to Mecca. R. Friedrich is Ch. Engr., at Constantinople.

RAILWAY.—Uruguay. — The government has made arrangements with the Uruguayan Central Ry. for construction of an extension to Centurion, on the Yaguaron River, with a branch line to Trienta y Tres. The proposed line will be from 250 to 300 miles in length and is to be completed in three years. Est. cost is $7,500,000, gold. Livesey, Son & Henderson, 14 South Place, London, E. C., England, are Consult. Engrs. F. Hudson, Montevideo, Uruguay, is Gen. Mgr. Edward C. O'Brien is U. S. Envoy at Montevideo.

TELEGRAPH WIRE.—Italy.—It is reported that an official order has been issued sanctioning the expenditure of 2,500,000 lire (about $500,000) by the Minister of Posts and Telegraphs on the erection of new telegraph lines and the improvement of existing lines between the following towns: Genoa and Messina, Naples and Turin, Bari and Florence, Reggio (Calabria) and Naples, Rome and Venice, Genoa and Milan, Florence and Milan, Milan and Venice. The expenditure is to be spread over a period of seven years; 300,000 lire (about $60,000) is to be spent in each of the years 1906-8 and 400,000 lire (about $80,000) in each of the years 1909-12.

RESERVOIR.—Spain.—Plans are invited for the construction of a reservoir on the left bank of the River Manzanares, between the Puente de los Franceses and the Puente de la Princesa, and for carrying out canalization works with a view to providing constantly the water necessary for the cleansing of the river, and the regularity of its current. Plans should be deposited at the "Ayuntamiento," Madrid, before April 15, to be examined by a committee of experts which will announce its decision within the term of two months. The contract for the execution of the works, for which a term of five years is allowed, will form the subject of a public call for bids; the author of the scheme selected being granted special rights when bidding.

GRAIN ELEVATORS.—Argentine Republic.—The government has granted a concession to Arnold J. Alexander, 121 Calle San Martin, and J. R. Davis, 447 Calle Belgrano, Buenos Aires, for the construction of grain elevators at 38 stations in the principal wheat-producing centers of the south. All the machinery will be allowed in duty free, and the concession also carries with it exoneration of taxation both national and provincial. It is said that with the approval of the Argentine Government this concession is to be transferred to a company which is to be registered in London with a capital of £500,000, for the purpose of erecting and running grain elevators in the Republic, and that Dr. Ezequiel Ramos Mexia, ex-Minister of Agriculture, has consented to be the president of the company's Local Board in this city. The other members are Messrs. Merlan, Dates and F. C. Cook, of 312 Calle San Martin, Buenor Aires.

RAILWAY CONSTRUCTION.—Italy.—The Ministries of Public Works and Finance are engaged in drawing up the budget of expenditure for the Italian State Railways during the years 1906-1916. It is estimated that during that period it will be necessary to expend 500,000,000 lire (about $100,000,000) on doubling lines, enlarging stations and other construction works. Many of the principal stations will be enlarged or reconstructed, among other those at Milan, Rome, Naples, Bologna, Catania, Messina, Turin, Verona and Venice. A further sum of 100,000,000 lire (about $20,000,000) will be required for augmenting the existing rolling stock. Moreover, a further expenditure of some 400,000,000 lire (about $80,000,000) will be entailed during the next ten years, to cope with the probable increase of traffic during that period; bringing the total sum required up to about $200,000,000. The State Railways Administration is anxious to obtain a government loan of this amount.

RIVER LOCKS.—South Australia.—The decision recently arrived at by the South Australian Government to install immediately the first of a series of locks and weirs to insure the navigability of the River Murray during the dry season, opens up a large field for engineering enterprise. The River Murray and its tributaries, among which the most important is the River Darling, have a navigable course of over 2,000 miles, and form a highway of great importance into the interior of Australia during the nine months of the year in which the natural level of the rivers admits of navigation. To provide the necessary depth of water for navigation during the remaining portion of the year it is estimated that six locks will be sufficient to maintain navigability over the whole of this river system. The lowest of these, whose construction has just been authorized, will be situated near the bend of the river known as Overland Corner, about 170 miles from the river mouth. The preliminary work will be begun at once.

RAILWAYS.—Africa.—W. Stanley Hollis, American Consul at Lourenzo Marquez, Portuguese East Africa, in a report on the progress on certain railways now being built in Africa, states that "it would seem to be worth the while of American manufacturers to send expert engineers to Africa for the purpose of examining the territory that the railways are opening up and to secure contracts for railway equipment. Africa is entering upon a great industrial and commercial era." The Lobita Bay-Benguella Ry. probably will be extended eastward to connect with various South African railway systems, with a point of junction near Buluwayo. If the project is carried out a large quantity of railway structural material will be required. Col. Joaquin José Machado, at Lisbon, Portugal, is General Manager of the railway company. Sir Douglas Fox, 28 Victoria St., Westminster, N. W., London, is Consult. Engr., and Griffith & Co., 62 London Wall, London, E. C., are the contractors.

Consul Hollis also reports that good progress is being made on the construction of the Lourenco Marquez section of the Swazieland Railway line, which has been fully surveyed to the frontier, and will be 74 kilometers long when completed; 22 kilometers of earthwork have been completed, and on these some 17 or 18 kilometers of rails have been laid. The work so far has consisted principally of ordinary earth cutting and filling; but as the line gets away from the coast it runs into a mountainous country and crosss one large and a number of smaller rivers. A number of bridges of some size will have to be built and a great deal of rock cutting will have to be done. The plans also call for two tunnels, the larger of which will be about 2,500 ft. long. Construction is being carried on by the Lourenco Marquez-Transvaal Railroad departmentally; the rough work is being done by Kaffir laborers under the superintendence of Portuguese overseers. German rails are being used. All large contracts for rails, bridge materials and other essentials for use in the construction of this line must be made through the ministry for the navy and the colonies at Lisbon, Portugal, to which American manufacturers who may wish to sell such materials are referred.

CIVIL SERVICE EXAMINATIONS

MECHANICAL AND TOPOGRAPHIC DRAFTSMAN.—St. Louis, Mo.—The U. S. Civil Service Commission announces an examination on March 28 to fill a vacancy in the position of draftsman, $125 per month, in the Engineer Department at Large, St. Louis, Mo. Form 1312.

SCIENTIFIC ASSISTANT.—Washington, D. C.—The U. S. Civil Service Commission will hold an examination on March 21 to fill vacancies in the positions of scientific assistant in soil management and in soil surveying, in the Bureau of Soils, Dept. of Agriculture. Form 1312.

INDUSTRIAL NOTES.

THE C. H. WHEELER MFG. CO. is the new name of the C. H. Wheeler Condenser & Pump Co., of Philadelphia.

THE A. LIETZ CO., San Francisco, has removed its factory main office and show rooms to 632-634 Commercial St.

THE STANDARD TURPENTINE CO. is the new name of the Weed Distilling & Mfg. Co., of N. Y. Angus McKenzie, Pres.

CHERRY VALLEY IRON WORKS, West Middlesex, Pa., is installing a 15-ton, 46 ft. span Northern crane made by Northern Engineering Works, Detroit.

THE POWER & MINING MACHINERY CO., of Cudahy, Wis., has just completed the largest McCully gyratory rock-crusher ever built; it is classed as No. 11, and has a capacity of some 2,000 tons per hour. The machine is for a crushing plant in New York State.

THE EMERSON STEAM PUMP CO., Alexandria, Va., reports that business during January was greater than the first five months of 1905. This company has just shipped an order of a full carload of the largest pumps they make to Houston, Tex., for irrigation purposes in that vicinity.

THE BUFFALO FORGE CO., Buffalo, N. Y., has furnished the North Star mine, near Nevada City and Grass Valley, with two 8-stage multiple turbine electric pumps, each suitable for a 1,400 ft. head, and each having a capacity of 300 gallons a minute. These pumps drain from the plant of the Bays Counties Electric Power Co.

JOSEPH BRUNO, VINCENT SALOMONE AND FRANK PETTITI, for the past three years a part of the Boylston Construction Co. on its contract for building Section 10 of the Wachusett Reservoir, having completed said work, have resumed their former associations as Bruno, Salomone & Pettiti, with offices at 23 Court St., Boston, Mass.

THE COLLEGE OF CIVIL ENGINEERING, CORNELL UNIVERSITY, Ithaca, N. Y., requests catalogues of engineering instruments, machinery and supplies. It is intended to place them on file in a large case, accessible to students, who will be encouraged to make themselves acquainted with the types of the different makers.

THE LIMA LOCO. & MACHINE CO., Lima, O., reports the following: Duluth, Virginia & Rainy Lake R. R., Duluth, Minn., has placed an order for one 65-ton Shay locomotive; L. B. Walling, Victoria, Fla., has placed an order for one 15-ton Shay locomotive; Sumpter Lumber Co., Ala., has plaecd an order for one 37-ton Shay locomotive.

THE NEW CENTURY CONSTRUCTION CO., 1 Madison Ave., New York, has been incorporated with the special purpose of constructing fireproof residences in and around New York City. In this construction they use hollow-tile wall and partitions and the Kahn system of reinforced concrete floors. While largely employed in the Middle West for other purposes this method of constructing is new as applied to private dwellings. The officers of the company are: W. W. Knoles, President; H. T. Weeks, Managing Director and W. W. Knapp, C. E., Treasurer. The Board of Directors include Wm. B. Barnford, M. Am. Soc. C. E., and Mr. Felix Kahn, of the Trussed Concrete-Steel Co., of Detroit.

THE KANSAS CITY BOLT AND NUT CO., Kansas City, Mo., expects to put in a 16-in. 3-high train of rolls, with the usual heating furnaces, complement of cropping shears, etc., and to add a 2-story machine shop, of brick, 75 x 100 ft., and considerable machinery to the bolt and nut department. Most of the work of buying is under way or completed.

THE ELECTRIC CABLE CO., 42 Broadway, New York, has just received an order from the N. Y. & L. I. R. R. Co. for 15 miles of cable insulated with Voltax, new high potential insulating compound. This order follows within a week upon that of the Interborough Rapid Transit Co., which has recently ordered from the same company the same amount of material.

THE SPRAGUE ELECTRIC CO., New York, whose motors are extensively used for driving laundry machines, has recently taken an order from the City Steam Laundry, Yonkers, N. Y., for an equipment, comprising a generator, switchboard and six motors. The large laundry machines in the new Knickerbocker Hotel, New York, are to be driven by Sprague electric motors.

THE ALBERTA ENGINEERING & CONSTRUCTION CO., Edmonton, Alta., N. W. T., recently formed of the various engineering and contracting interests, wishes to take the agency for a brand of cement, and it desires to be placed in touch with makers. This company will soon be in the market for concrete mixers, gasoline engines, crushers, elevators, etc., as noted recently. R. R. Keely is Pres. and Mgr.

THE BLAW'S COLLAPSIBLE STEEL CENTERING CO., Pittsburg, reports that during the past three months it has leased centers in every state and territory throughout the union, and is sending considerable amount of shapes and sizes to foreign countries. Contractors report a saving of 33⅓% to 50% in labor. The number of feet leased during this period covers at least $250,000,000 worth of concrete sewer contracts, including railroad culvert construction in concrete.

THE B. F. STURTEVANT CO., of Boston, is furnishing for export to the Philippine Islands a complete drying apparatus for use in connection with one of the newly-invented rotary dryers for vegetable products. The Wanskuck Co., Providence, R. I., and the Miramichi Pulp & Paper Co., Chatham, N. B., have just placed orders with the B. F. Sturtevant Co. for the installation of standard economizers. In both power plants these economizers are to be installed in connection with Sturtevant induced draft apparatus.

THE BUFFALO FORGE CO., Buffalo, N. Y., is employed on heating and ventilating installations for railroad work, among others being these: Somerset, Ky., shops of the Queen & Crescent R. R.; boiler, tank and carpenter shops of the B. R. & P. R. R., at Dubois, Pa. Large ventilating fans and engines for the Erie R. R. for the Bergen tunnel. And the following roundhouses: Southern Ry., Monroe, Va., 18 stalls; A. T. & S. Fe Ry., Emporia, Kan., 32 stalls; Ills. Central R. R., Burnside, Ill., 23 stalls; M. K. & T. R. R., Parsons, Kan., 32 stalls.

THE INTERBOROUGH RAPID TRANSIT CO., New York, has placed an order with the Electric Cable Co., of New York, for 15 miles of cables insulated with Voltax, the new potential compound which has just been placed on the market. Recent tests of the material made by the Electrical Testing Laboratories of New York show that this material can withstand a voltage 100% greater than rubber insulation and has withstood high potential insulation, resistance and melting point tests that no other compound yet discovered has withstood. The costs of this material are about 20% less than rubber insulation.

CONTRACT PRICES.

The names of parties awarded contracts are printed in capital letters.

*STEEL SHEDS.—New Orleans, La.—Tabulated bids received on Feb. 6 by the Board of Commissioners, Port of New Orleans, for construction and erection of steel work for any or all of seven steel sheds were as follows. J. F. Coleman, Hibernia Bank Bldg., is Engr. The bidders were: (a) BROWN-KETCHAM IRON WORKS, Indianapolis, Ind. (awarded contract for whole number); (b) same firm, prices on single sheds; (c) McClintic-Marshall Construction Co., prices on whole number or none; (d) same company, prices on single sheds; the following firms bid on single sheds: (e) Joliet Bridge Co.; (f) Champion Iron Works; (g) Bedell Structural Steel Co.; (h) Strobel Steel Construction Co.; (i) Penn Bridge Co.; (j) Milwaukee Bridge Co.; (k) Morava Construction Co.; the following companies submitted informal bids: American Bridge Co.; New Jersey Bridge Co.; Virginia Bridge & Iron Co.

Bids for Steel Sheds Opened Feb. 6, by the Board of Commissioners of the Port of New Orleans, La.

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Clouet St.:											
395,000 lbs. steel	....	$3.49	.....	$3.79	$3.95	$3.80	$3.65	$3.55	$3.65	$4.25	$3.78
1,200 lbs. cast iron	....	5.60	.....	4.50	4.00	4.00	3.50	3.25	3.50	4.25	4.00
Mandeville St.:											
735,000 lbs. steel	....	3.45	.....	3.65	3.95	.....	3.65	3.55	3.55	3.75	3.73
2,600 lbs. cast iron	....	5.60	.....	4.50	4.00	.....	3.50	3.25	3.50	3.75	4.00
Hospital St.:											
280,000 lbs. steel	....	3.51	.....	3.93	3.95	.....	3.65	3.55	3.65	3.75	3.85
1,000 lbs. cast iron	....	5.60	.....	4.50	4.00	.....	3.50	3.25	3.50	3.75	4.00
Picayune Tier:											
550,000 lbs. steel	$3.42	3.47	3.55	3.72	3.95	.....	3.65	3.55	3.60	3.75	3.75
2,000 lbs. cast iron	5.50	5.60	4.50	4.50	4.00	.....	3.50	3.25	3.50	3.75	4.00
Toulouse St.:											
1,220,000 lbs. steel	....	3.45	.....	3.58	3.90	.....	3.65	3.55	3.50	3.75	3.67
4,000 lbs. cast iron	....	5.60	.....	4.50	4.00	.....	3.50	3.25	3.50	3.75	4.00
Erato St.:											
1,368,000 lbs. steel	....	3.44	.....	3.55	3.85	3.75	3.65	3.55	3.50	3.75	3.63
3,000 lbs. cast iron	....	5.60	.....	4.50	4.00	4.00	3.50	3.25	3.50	3.75	4.00
Eighth St.:											
530,000 lbs. steel	....	3.47	.....	3.71	3.95	3.80	3.65	3.55	3.55	3.75	3.87
2,000 lbs. cast iron	....	5.60	....	4.50	4.00	4.00	3.50	3.25	3.50	3.75	4.00
Time, days	230	230	220	310	319	.....	520	313	285	540	275
Totals	$174,547	$176,492	$180,989	$185,285	$199,243	$86,696	$185,307	$180,189	$180,485	$193,006	$189,335

WATER SYSTEM.—Manila, P. I.—We are officially advised by J. F. Case, Ch. Engr. of the Department of Sewer and Water-Works Construction at Manila, under date of Jan. 12, that the schedule of itemized bids received on Jan. 2 for the gravity water supply system were as follows. An outline of the project and list of bidders with grand totals of their bids were given on Jan. 11. (a) J. G. White & Co., 49 Exchange Pl., New York City; (b) MATSON, LORD, BELSER & COMPANY, San Francisco, Cal. (awarded contracts for Sections A and E); (c) ATLANTIC, GULF & PACIFIC CO., 13 Park Row, New York City (awarded contracts for Sections C and D); (d) Schaw-Batcher Co., Sacramento, Cal. (rejected); (e) D. W. Smith; (f) H. W. PEABODY & CO., San Francisco, Cal. (awarded contract for Section B):

BIDS RECEIVED FOR GRAVITY WATER SUPPLY SYSTEM AT MANILA, P. I.

CONTRACT A.—Dam.

	(a)	(b)	(c)	(d)	(e)
1,000 cu. yds. earth excavation, Class A..	$0.77	$0.518	$0.50	$0.50	$0.43
500 cu. yds. earth excavation, Class B..	1.03	1.23	2.00	.50	.60
1,600 cu. yds. loose-rock excavat'n, Class C	1.54	1.18	.50	.75	.70
400 cu. yds. loose-rock excavat'n, Class D	1.72	2.07	2.00	.75	1.00
11,000 cu. yds. solid-rock excavat'n, Class E	1.92	3.485	1.00	2.00	1.95
500 cu. yds. solid-rock excavat'n, Class F	2.28	4.05	4.00	3.00	2.70
500 cu. yds. solid-rock excavation without blasting, Class G	12.25	8.15	4.00	4.00	4.50
23,000 cu. yds. rubble concrete masonry....	7.00	7.10	7.85	9.50	9.90
3,600 sq. yds. facework of rubble concrete masonry	27.12	3.19	5.00	3.00	3.00
1,200 cu. yds. riprap in place	3.50	2.75	2.00	1.00	1.25
300 cu. yds. Portland cement concrete masonry, 1:2½:5	11.46	11.75	7.00	12.00	12.00
206 cu. yds. concrete gate well lining....	14.00	14.35	10.00	12.00	12.00
206 cu. yds. brk masonry gate well lining	23.70	30.75	.....	14.00	18.00
1 gate-house at dam, complete					
45 tons hauling, caring for, placing iron, etc.	38.50	48.47	40.00	20.00	18.00
Total, omitting concrete gate well lining	$321,707	$244,889	.....	$274,634	$282,318
Total, omit'ng brk msnry gate well lining	$319,708	$241,510	$230,010	$274,222	$281,082

CONTRACT B—Furnishing Steel Plates and Rivets.

	(a)	(b)	(c)	(d)	(f)
5,300,000 lbs. steel plates	$0.02	$0.0184	$0.0197	$0.02	$.017836
155,000 lbs. steel rivets	0.05¾	0.03	0.036	0.03½	.034642
Total	$114,912	$102,170	$109,990	$111,425	$99,900

CONTRACT C.—Manufacturing and Laying Steel Pipe.

	(a)	(b)	(c)	(d)
58,500 cu. yds. earth excavation and refilling	$0.78	$0.506	$0.61	$0.50
1,000 cu. yds. loose-rock excavation and refilling	1.24	0.60¾	1.00	1.00
9,000 cu. yds. solid-rock excavation and refilling	2.29	1.48½	1.50	1.90
7,500 cu. yds. Adobe-stone excavation and refilling	1.18	1.21½	1.00	1.50
55,800 lin. ft. manufacturing, etc., 42-in. steel pipe	3.56	3.82	3.75	3.00
450 lin. ft. furnishing, etc., 36-in. c.-i. pipe under Mariquina River	24.50	46.62	20.00	16.00
1,000 lin. ft. furnishing and laying 6-in. waste pipe, No. 14 B. W. G.	.65	3.37½	.50	1.00
200 cu. yds. Portland cement concrete masonry 1:2½:5	9.30	13.75	20.00	10.00
150 cu. yds. Portland cement concrete masonry 1:4:10	6.68	8.80	10.00	10.00
Hauling iron, etc., per ton	40.00	48.47	40.00	20.00
Total	$289,515	$294,266	$281,935	$237,700

CONTRACT D.—Tunnel.

	(a)	(b)	(c)	(d)	(e)
1,050 cu. yds. earth excavation in open trench	$0.78	$0.69	$0.75	$0.50	$0.30
16,000 cu. yds. borrowed earth for embankment	.78	.55	.75	.50	.50
2,400 cu. yds. rock excavat'n in open trench	4.35	1.24	2.00	2.00	1.70
17,500 cu. yds. tunnel excavation	6.10	6.10	6.70	6.50	5.90
3,500 cu. yds. concrete lining for tunnel ..	12.35	10.00	6.00	12.00	14.50
37,500 sq. yds. plaster coat on unlined sections	.40	.63	.50	.30	.50
270 cu. yds. concrete masonry for chamberts, culverts, etc.	12.35	9.00	20.00	12.00	12.00
Total	$192,048	$180,305	$179,987	$183,565	$188,385

CONTRACT E.—Reservoir and Gatehouse.

	(a)	(b)	(c)	(d)	(e)
29,000 cu. yds. earth excavation	$0.33	$0.64	$0.20	$0.50	$0.30
235,000 cu. yds. rock excavation	.95	.64	.80¼	.85	.95
43,500 sq. yds. plaster coat for reservoir..	.38	.55	.60	.10	.35
200 cu. yds. concrete masonry lining ..	8.48	9.18	12.00	10.00	10.50
325 cu. yds. concrete masonry for parapet walls	8.70	9.20	10.00	12.00	12.00
1,650 cu. yds. concrete masonry in gate chambers and core walls	7.67	8.75	10.00	12.00	14.50
1 gate-house at reservoir, complete...					
41 tons hauling, etc., iron and metal work in gatehouse and reservoir ...	40.00	41.20	30.00	20.00	25.00
Total	$280,699	$222,478	$270,017	$260,120	$284,625

LOCK AND DAM.—Dallas, Tex.—Abstract of proposals received on Feb. 15 by Capt. W. P. Wooten, U. S. Engrs., for building lock and dam No. 1 and dam at Parsons Slough in Section One, Trinity River, here given. (1) D. C. McCord, Dallas, T. bid has been recommended for acceptan (2) Rudolph S. Blome Co. (a) Plan A; Plan B.

LOCK AND DAM NO. 1.

	(1)	(2)
3 acres grubbing and clearing	$15.30	$50.00
30,000 cu. yds. excavation	.36	.80
2,000 lin. ft. round timber	.06	.40
29,000 lin. ft. round piles	.19½	.50
5 cords brush	2.40	10.00
3,302 cu. yds. concrete in lock walls, Plan A	9.10	10.00
4,692 cu. yds. concrete in lock walls, Plan B	7.10	9.00
2,238 cu. yds. other concrete	7.10	9.00
4,800 ft. B. M boulevard gates	72.00	60.00
60 ft. B. M. oak timber	.12	.10
47,000 ft. B. M. timber in permanent work	84.00	55.00
37,100 ft. B. M. timber in cribs	54.00	50.00
2,000 cu. yds. riprap	4.92	3.50
122,903 lbs. iron and steel	.11	.08
195,000 lbs. steel reinforcing rods, Plan A	.07	.08½
49,600 lbs. steel reinforcing rods, Plan B	.07	.05
3,020 lbs. chain	.13	.07
1,260 lbs. drift bolts	.09	.06
149,000 ft. B. M. sheet piling	60.00	50.00
1,030 lin. ft. sheet piling, steel	3.00	1.20
7,650 cu. yds. plain filling	.18	.40
2,600 cu. yds. compacted filling	.48	.55
1,518 cu. yds. filling in lock walls, Plan A	.48	.60
4,725 sq. ft. riprap paving	.18	.17
4,760 sq. ft. paving on spalls	.21½	.22½
1,422 sq. ft. paving in concrete	.32½	.30
410 sq. ft. paving for cribs	.36	.20
500 sand bags, each	.12	.25
68½ lin. ft. gages	3.00	1.50
2,550 lbs. crab crane and service car	.23	.11
252 frames with rollers, each	10.80	4.50
500 lin. ft. drains under lock floor	.60	.30
Totals	(a) $128,131	(a) $141,552
Totals	(b) $119,780	(b) $142,654

PARSONS SLOUGH DAM.

	(1)	(2)
5 acres grubbing and clearing	$15.30	$50.00
4,500 cu. yds. excavation	.37	.90
1,000 lin. ft. round timber	.06	.45
13,075 lin. ft. round piles	.25	.55
7 cords brush	3.00	10.00
45,360 ft. B. M. sheet piles	65.00	55.00
750 cu. yds. concrete	8.00	10.80
300 cu. yds. riprap	5.25	4.00
34,390 lbs. iron and steel	.10	.08¼
2,400 lbs. steel reinforcing rods	.09	.05½
625 lbs. chain	.14	.10
1,600 cu. yds. compacted filling	.55	.55
2,240 sq. ft. paving on spalls	.25	.25
720 sq. ft. paving in concrete	.36	.30
250 sand bags, each	.15	.30
9½ lin. ft. gage	4.00	2.50
10,960 ft. B. M. timber in cribs	60.00	55.00
4,000 ft. B. M. timber in permanent work	90.00	50.00
800 cu. yds. surface soil	1.00	1.00
1,050 lbs. crab	.20	.12
Totals	*$23,159	**$30,321

Amount available for this contract, $175,000.

*If awarded contract for both lock and dam No. 1 and Parsons Slough dam, D. C. McCord proposes to decrease his unit prices 5% on both pieces of work.

**If awarded contract for both lock and dam No. 1 and Parsons Slough dam, Rudolph S. Blome Co. proposes to decrease its unit prices 4% on Parsons Slough dam only.

INDUSTRIAL NOTES.

THE QUINCY, MANCHESTER, SARGENT CO. has been incorporated and will take over the business of the Railway Appliances Co., including the business and plant of the latter company at Chicago Heights (formerly owned by the Q. & C. Co.), and also the business and plant of the Pedrick & Ayer Co., of Plainfield, N. J., manufacturing locomotive repair tools, electric and pneumatic hoists and cranes and pneumatic riveters. The company will also act as sole selling agent for the product of the Elastic Nut & Bolt Co., of Milwaukee, Wis. The offices of the new company are in the Old Colony Building, Chicago, and at 114 Liberty St., New York.

THE LIMA LOCOMOTIVE & MACHINE CO., Lima, O., reports as follows: Great Southern Lumber Co., Buffalo, placed an order with the Lima L. & M. Co. for six 65-ton Shay locomotives for use on its timber lands in Mississippi. Ozan Lumber Co., Prescott, Ark., has placed an order for one 37-ton Shay locomotive. F. A. Talley & Co., Keenan, Tex., has placed an order for one 23-ton Shay locomotive. Ellisville (Miss.) Lumber Co. has placed an order for two 14 × 18 mogul locomotives. Williamsburg Lumber Co., Ellisville, has placed an order for one 14 × 18 mogul locomotive. Wilmar (Ala.) Lumber Co. has placed an order for one 14 × 18 mogul locomotive.

THE INDEPENDENT PNEUMATIC TOOL CO., Chicago, advises that it has received a cable order from one of its customers in London, Eng., for 300 (Thor) piston air drills, reversible flue rolling, reaming, tapping and wood boring machines, and pneumatic hammers. The domestic business has grown to such an extent that the company is several months behind in its orders, the present capacity of its plant being entirely inadequate to meet the demand. It has leased a large building adjoining its plant at Aurora, and will purchase $50,000 worth of new machinery at once for installation therein. The plant is running night and day shifts and it is intended to erect a large addition thereto at the earliest possible date.

THE MEAD-MORRISON MFG. CO., Cambridge, Mass., announce that for the general good of the business it was thought necessary that the Rawson & Morrison Mfg. Co. should be consolidated with the Mead-Morrison Co., and the business of both companies will hereafter be conducted under the name of the Mead-Morrison Mfg. Co. All the men who have made the Rawson & Morrison Mfg. Co. successful will be retained by this company. It will continue to manufacture the same lines of machinery that both companies have been making in the past, such as hoisting engines, derrick swingers, electric hoists, belt hoists, suspension cableways, as well as cable roads and all kinds of machinery for handling coal and other bulky materials.

THE LAWRENCE PUMP & ENGINE CO., Lawrence, Mass., has been awarded the contract for the centrifugal pumps to be installed at the Arlington Mills. Included in this contract there is one pump having a capacity of 10,000,000 gallons per day, directly coupled to an electric motor to be used to supply water to the filtration plant. There is also another pump of the same capacity directly coupled to a motor of 100 HP. which will be used to furnish pure water for manufacturing purposes. In addition to the main water pumps the company is to furnish all of the auxiliary pumping machinery which is required in connection with the large water purification plant, including lime and alum pumps, also the wash pump, which has a capacity of four million gallons per day.

THE STRAUSS BASCULE & CONCRETE BRIDGE CO., 803 Chicago Opera House Bldg., reports that it has acquired the patents of Mr. J. B. Strauss and will carry on the business of designing and building bascule bridges and reinforced concrete bridges under these patents. It will also undertake general construction in steel and reinforced concrete structures. The Strauss bascule system has been adopted in a bridge recently built for the Wabash Ry. at Cleveland, O., and for a bridge to be built at Camden, N. J.; it is also embodied in the accepted design for the Knippel bridge at Copenhagen, Denmark, the designs for which were opened to international competition. Ribbed concrete steel bridges of the Strauss system have been built at Deer Park, La Salle, Ill., and at Belvidere, Ill.

A. E. HOERMANN, 261 Broadway, New York, dealer in pneumatic and other machinery, has put a new device on the market to be used in connection with an ordinary air or electric drill and to perform the work of screwing up, tightening and also unscrewing nuts. Without doubt the largest field for this tool will be the railroad market. On some of the wooden freight cars, for instance, there are as many as 600 nuts of one kind and needless to say the time consumed in tightening these by hand with a wrench is considerable. The tool built according to A. E. Hoermann's ideas has an adjustable friction arrangement, which enables the operator to regulate the tension for the largest nut to be tightened. This tool has been thoroughly tested at the shops of the C. R. R. of N. J., at Elizabethport.

THE GENERAL ENGINEERING CO., Consult. Engrs., announces its incorporation under the laws of Utah with the following as officers and directors: J. M. Callow, Pres.; Jas. W. Neill, Vice-Pres.; Frank E. Johnson, Secy. and Treas.; Geo. M. Bacon, Frank P. Callow. The offices of the company are located temporarily at Nos. 320-322 Dooly Block, Salt Lake City, until completion of the company's building at 159 Pierpont St. The company will do a general mining, metallurgical, civil and mechanical engineering business; design and construct concentrating, smelting, milling and power plants; furnish general and detail reports and estimates on all classes of engineering. The laboratory is also equipped to make a practical and continuous concentration test of from 10 to 25 ton lots.

THE ALLIS-CHALMERS CO., Milwaukee, Wis., reports that, following the recent visit at its West Allis and Reliance Works made by a party of officials of the Carnegie Steel Co. and the U. S. Steel Corporations, orders have been placed for eight pairs of standard vertical, long cross-head type, furnace blowing engines, similar to others now installed in various plants of the steel companies in the Pittsburg district which have been built by Allis-Chalmers. Seven pairs of these huge units will be installed at the Edgar Thompson Furnaces, Braddock, Pa., and one pair at the Isabella Furnaces, Sharpsburg, Pa., both within the Pittsburg district. Eight of the engines will have steam cylinders 44 ins. in diameter by 60 in. stroke and air cylinders 84 ins. × 60 ins. The remaining units will be equipped with steam cylinders 84 ins. × 60 ins. and air cylinders 84 ins. × 60 ins.

THE C. O. BARTLETT & SNOW CO., Cleveland, O., reports the following recent sales: Mechanical dryer to Masurite Explosive Co., Sharon, Pa.; rotary direct-heat dryer to Cleveland Asbestos Plaster Co., Cleveland, O.; steam dryer to E. H. Stanton Co., Spokane, Wash.; carload of milling machinery to Mexico City; paint machinery to Frank Stuart, Wilkinsburg, Pa.; mining machinery to Dudley H. Norris, Lavateeay, Mex.; complete plaster plant to Mahoning Builders Supply Co., Youngstown, O.; coal handling machinery to Monongahela R. Con. Coal & Coke Co., Pittsburg; paint machinery to Protectus Co., Philadelphia; mining machinery to Montana Zinc Co., Butte, ash and cinder elevator to Cleveland Light & Power Co., Cleveland; special conveyor and elevator to Barnesville (O.) Glass Co.; conveying and elevating machinery to Greenville Silica Sand & Quarry Co., Greenville, Pa.

THE H. W. JOHNS-MANVILLE CO., 100 William St., New York, has placed on the market the Transite Asbestos Lumber Smoke Jack, and a circular regarding it has just been printed. For several years past it has been the custom of the H. W. Johns-Manville Co. to gather together its various branch managers and salesmen from all over the country in an annual convention. This convention met in New York early in February and about 150 men were present. After a session lasting four days, the convention wound up with a farewell dinner at the New York Athletic Club, on Friday evening, Feb. 2. The H. W. Johns-Manville Co. are manufacturers of asbestos and magnesia products and electrical materials. Representatives from the following branches were present: Milwaukee, Chicago, Boston, Philadelphia, St. Louis, Pittsburg, Cleveland, San Francisco, Los Angeles, Seattle, Kansas City, Minneapolis, Little Rock and New Orleans.

ALLIS-CHALMERS CO., Milwaukee, Wis., reports that Castle & Cooke, Ltd., Honolulu, H. I., will install for Alexander & Baldwin an Allis-Chalmers triple expansion horizontal double acting plunger pumping engine of the same size and type furnished by the same builder for the Hawaiian Commercial & Sugar Co. The capacity will be 10,000,000 gallons against a head of 370 ft. and it is expected to be ready for operation early in the fall. The Traylor Engineering Co., New York, has recently purchased for the Traylor Mfg. & Const. Co., Allentown, Pa., a 14 × 24-in. Reynolds Corliss engine, direct coupled to a 100-KW. engine type "Bullock" generator, operating at 150 r. p. m. The Pittsburg Ry. & Light Co., Pittsburg, Kan., many of whose stockholders are Carthage, Mo., capitalists, has recently purchased a 22 × 36-in. Reynolds Corliss engine, suited for left-hand drive and a 300-KW. engine type, direct current generator for the enlargement of the present plant. The Cyclops Iron Co., San Francisco, recently purchased a 12 × 36-in. Allis-Chalmers girder frame engine, arranged for right-hand drive. C. A. MacDonald, Chicago, builder of the "Hercules, Ill., Machine," will add a new engine unit to the present power plant of his establishment. The new unit is an Allis-Chalmers, heavy duty, tandem, compound engine, with cylinder 12 × 24 ins. in diameter and a 42-in. stroke.

TRADE PUBLICATIONS.

VALVES, INDICATORS, GAGES, ETC.—The Lunkenheimer Co., Cincinnati, O. Cloth; 5 × 7½ ins.; pp. 472; illustrated.

This is the regular 1906 catalogue and price-list of the company.

ROLLER MILLS.—Allis-Chalmers Co., Milwaukee. Paper; 8 × 10½ ins.; pp. 35. Illustrated.

This is a description of the Allis Noiseless Belt Roller Mill, the standard production of this company.

METAL ROOFING.—Merchant & Evans Co., Philadelphia, Pa. Paper; 8 × 5½ ins.; pp. 56; illustrated.

This gives general information on the kinds and use of different roofing materials, principally sheet metal.

MECHANICAL INTERLOCKING. — General Railway Signal Co., Buffalo, N. Y. Cloth; 6 × 9 ins.; pp. 480. Illustrated.

This is a catalogue and price-list of mechanical interlocking and signalling devices made by the company named above.

INCANDESCENT ELECTRIC LAMPS.—Westinghouse Electric & Mfg. Co., Pittsburg, Pa. Paper; 5 × 7½ ins.; pp. 38; illustrated.

Incandescent lamps of all shapes and capacities, both standard and special, are fully illustrated.

STEEL HAMMERS.—The David Maydole Hammer Co., Norwich, Chenango Co., N. Y. Paper; 6 × 9 ins.; pp. 48; illustrated.

This is the regular illustrated catalogue and price-list of the Maydole solid crucible cast-steel hammers.

TRACK SANDERS.—Edmund G. Fisher & Co., 706 Fisher Building, Chicago. Paper; 4 × 9 ins.; pp. 12; illustrated.

The Watters pneumatic track-sander for locomotives is described and illustrated, and a number of testimonials are given from railways using this device.

ENGINE LOAD INDICATOR.—John F. Shreffler, 373 South Campbell Ave., Chicago. Paper; 3½ × 6 ins.; pp. 4; illustrated.

This instrument is designed to give a constant reading of the load on the engine, and also to act as an overload alarm.

ELECTRIC HEATING UTENSILS.—The Portland General Electric Co., Portland, Ore. Paper; 6 × 9 ins.; pp. 16; illustrated.

The advantages gained in the use of electricity for domestic purposes and also in the use of electric signs, are set forth.

STEEL CONSTRUCTION, CRANES, ETC.—The Interstate Engineering Co., Cleveland, O. Paper; 9 × 6 ins.; pp. 72; illustrated.

This bulletin is intended to show, principally by illustration, the various lines of steel construction in which this company is engaged.

INDUSTRIAL RAILWAY SUPPLIES.—C. W. Hunt Co., 45 Broadway, New York City. Paper; 7 × 9 ins.; pp. 63; illustrated.

This contains a full list of parts for equipping an industrial plant with a narrow gage railway. Track, switches, cars, electric locomotives, portable cranes, etc., are well illustrated.

FAN MOTORS.—The Emerson Electric Mfg. Co., St. Louis, Mo. Paper; two pamphlets; 5¼ × 7¾ ins.; pp. 31; 6¾ × 9 ins.; pp. 39; both illustrated.

These pamphlets relate to the Trojan and Emerson motor-driven fans of the small class for desk and ceiling attachment; also small exhaust fans.

RAILWAY INSPECTION CARS.—Light Inspection Car Co., Hagerstown, Ind. Paper; 7 × 5 ins.; pp. 20; illustrated.

The cars, propelled by the rider have bicycle frames, seats and driving gear, with rubber-covered tires. The motor cars have heavier frames and are fitted with 3½-HP. gasoline engines.

CROSBY SPRING-SEAT VALVES.—Crosby Steam Gage & Valve Co., 16 Dey St., New York City. Paper; 6 × 9½ ins.; pp. 4; illustrated.

The characteristic novelty of this valve is its conical seats, presenting a double seating capacity, thus reducing the liability of leaking or wearing.

TRANSFORMERS.—Westinghouse Electric & Mfg. Co., Pittsburg, Pa. Paper; 7 × 10 ins.; pp. 8. Circular No. 1,120. Illustrated.

Type C is merely an addition to the several forms of core type transformers. They are made single phase in capacities from 6 to 50 KW., inclusive.

OIL ENGINES AND AIR COMPRESSORS.—De La Vergne Machine Co., Foot of East 138th St., New York City. Paper; 4 × 8½ ins.; pp. 6; illustrated.

The "Hornsby-Akroyd" crude and fuel oil engines are designed mainly for contractors' use, either stationary or portable, and are geared to air compressors.

CORRUGATED SHEET METAL.—The Brown Hoisting Machinery Co., Cleveland, O. Paper; 6 × 9 ins.; pp. 32; illustrated.

Ferroinclave is the name given to a new corrugated sheet steel of special shape. It is used principally in the construction of fire-resistive roofing, siding, flooring, etc., for factory buildings, power plants and the like.

PUNCHING AND SHEARING MACHINES.—Henry Pels & Co., 68 Broad St., New York City. Paper; 8 × 11 ins.; pp. 47; illustrated.

A wide variety of power shears and punches, single or combined, designed after the Johns patent, are described. A line of hand-power machines and adjustable trestles are also shown.

ROASTING FURNACES.—Allis-Chalmers Co., Milwaukee, Wis. Bulletin No. 1409. Paper; 8 × 10½ ins.; pp. 8; illustrated.

The McDougall roasting furnace is a mechanically operated, circular, multiple-hearth furnace of the self-contained type, having five or more hearths superimposed upon each other. The details are fully described and illustrated.

HYDRAULIC JACKS.—The Watson-Stillman Co., 46 Dey St., New York City. Catalogue No. 68. Paper; 6 × 9 ins.; pp. 91; illustrated.

This is a new edition of Catalogue No. 61 and contains a few additional sizes and cuts. Jacks of all kinds are shown—hydraulic, pneumatic and hand—of the standard manufacture of this company.

ARC-LIGHTING APPARATUS. — General Electric Co., Schenectady, N. Y. Bulletin No. 4428. Paper; 8 × 10½ ins.; pp. 36. Illustrated.

This bulletin gives a description of the different types of arc lamps designed for various purposes, and also various accessories, such as diffusers, reflectors, ceiling suspensions, transformers, etc.

GAS BOOSTERS.—B. F. Sturtevant Co., Hyde Park, Mass. Paper; 6½ × 9 ins.; pp. 8; illustrated.

This illustrates how the Sturtevant gas exhausters may be used to locally increase the pressure of gas to meet special requirements. In some sections the pressure in the gas mains is too low for brazing and must needs be increased by some means.

CORLISS ENGINES.—Allis-Chalmers Co., Milwaukee, Wis. Bulletin No. 1501. Paper; 8 × 10½ ins.; pp. 19; illustrated.

The Reliance Corliss engines are of the latest design in Corliss construction, but are designed with the idea of economizing floor space, making more concentrated power by increasing rotative and piston speeds and a more thorough reconsideration of details.

VALVES, PIPE JOINTS AND FITTINGS, AND STEAM AND OIL SEPARATORS.—Crane Co., Chicago, Ill. Paper; 7½ × 10 ins.; 18 circulars, varying from 4 to 32 pp.; illustrated.

These circulars give specifications for pipe bends, automatic and mechanical relief and stop valves, expansion and flanged pipe joints, steam traps and separators, and pipe dies.

GASOLINE INSPECTION CARS.—Railway Appliances Co., Old Colony Building, Chicago. Paper; 6 × 9 ins.; pp. 8; also circulars 8¼ × 12 ins.; all illustrated.

The pamphlet and circulars illustrate a number of designs of inspection and section cars operated by gasoline engines. A small motor passenger car for railway service and a gasoline locomotive for mine and industrial work are also included.

LATH MILLS AND BOLTERS.—Allis-Chalmers Co., Milwaukee, Wis. Paper; 8 × 10½ ins.; pp. 11. Bulletin No. 1,701. Illustrated.

Single, three, or ten saw lath mills are described in detail. An important feature is the new guide, so constructed that a 1½ in. square picket can be taken off of any bolt and the remainder made into lath. The feeds are especially powerful.

STEEL HIGHWAY TRACK.—The Steel Highway Track Construction Co., Pittsburg, Pa. Paper; 9¼ × 6 ins.; pp. 24; illustrated.

The track consists of broad, flat rails attached to cast-iron chairs or supports, the top of the rail being level with the road surface. The rail has a rib on the under side and a lip on the inner edge to retain wheels on the track. It is the invention of Mr. T. H. Gibbon, and has been laid on a stretch of road at Etna, Pa. A modified system has the rails embedded in concrete, dispensing with the cast-iron supports.

STEAM STAMP.—Allis-Chalmers Co., Milwaukee, Wis. Bulletin No 1403. Paper; 8 × 10½ ins.; pp. 47; illustrated.

The Tremain steam stamp mill has been designed especially to meet the demands of those who own mining properties in the first stages of development, and desire an inexpensive crushing, amalgamating or concentrating plant of moderate capacity. Very complete instructions for the erection and care of the stamp and other accessories, together with the capacity, amount of fuel and water required, are given. The bulletin also gives a method, in detail, for testing free milling gold ores without a mill.

ELECTRIC LIGHTING APPLIANCES, CABLES AND SWITCHES.—General Electric Co., Schenectady, N. Y. Paper; 8 × 10½ ins. and 5¼ × 7¾ ins.; pp. 4, 34, 16, 2; illustrated.

Bulletin No. 4,431 is descriptive of modern appliances for interior illumination, more particularly the "enclosed arc" and concentric diffuser used in stores, shops, etc. Catalogue No. 7,594 gives price lists of the various commercial arc lamps. No. 1,050 states the advantages of varnished cambric cables over other insulations and gives price list for different sizes. Two flyers Nos. 2,169 and 2,170 deal with knife and also flush pocket switches.

CONCRETE MIXER.—The Eureka Machinery Co., Jackson, Mich. Paper; 10½ × 8 ins.; pp. 8; illustrated.

The mixer is of the trough type, with a longitudinal shaft fitted with blades or paddles. At the receiving end is a hopper with compartments for the materials, and these compartments have automatic feeders to deliver the materials in any desired proportions. Water is sprayed from a pipe above the trough, to which a hose can be attached. Agitators in the hoppers secure a steady feed. The machine, with a gasoline engine and small pump, can be mounted on a truck, so that for sidewalk work, etc., it can be moved along as the work progresses, and so save much wheeling of the concrete.

STEAM ENGINES.—Harrisburg Foundry & Machine Works, Harrisburg, Pa. Paper; 6 × 9¼ ins.; pp. 57; illustrated.

This attractive publication is devoted to descriptions of the several types of Fleming engines built by the company, which are illustrated by line drawings and half-tone engravings. Some of the principal construction features and parts are described in detail. They are all horizontal engines, mostly with single piston valves for both simple and tandem compound engines, but there is also a four-valve arrangement which is the adaptation of the Corliss system to short-stroke, high-speed engines. Ordinary long-stroke Corliss engines are also included. Other specialties include the Fleming steam turbine and the Fleming superheater.

For other Proposal Advertisements see pages 43, 44, 45, 46, 47, 48, of Advertisements and Construction News page 92.

WATER PIPE, SPECIALS AND WATER METERS.

Winnipeg.

Separate sealed tenders, addressed to Ald. J. C. Gibson, Chairman of the Fire, Water and Light Committee, for the supply of a quantity of water pipe and specials of various sizes and water meters for the City Water-Works, will be received at the office of the undersigned up to 3.30 p. m., on

MONDAY, MARCH 26, 1906.

Specifications and forms of tender may be obtained at the Office of H. N. Ruttan, City Engineer, Winnipeg, Canada.

Each separate tender must be accompanied by an accepted cheque or draft, payable to the order of the City Treasurer, or cash deposit for the sum called for in the form of tender supplied, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract with approved sureties if called upon to do so.

The city reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk.

City Clerk's Office,
Winnipeg, March 1, 1906. 10-2t

ASPHALT PAVEMENTS.

Green Bay, Wis.

This city will open bids April 2d for construction of about two miles Asphalt Pavements. For particulars, address

W. W. REED,
City Engineer.

10-2t

DEPARTMENT OF THE INTERIOR, Washington, D. C., February 8, 1906. Sealed proposals will be received at the office of the Engineer, United States Reclamation Service, Glendive, Mon., March 12, 1906, for furnishing about 427,000 pounds of square steel bars for reinforcement of concrete. Particulars may be obtained by application to the Chief Engineer of the Reclamation Service, U. S. Geological Survey, Washington, D. C., or to the Project Engineer, Glendive, Mon. THOS. RYAN, Acting Secretary. 7-4t

WATER-WORKS EQUIPMENT.

City Clerk's Office, East Orange, N. J.

Sealed proposals, addressed to Edgar Williams, City Clerk, will be received by the City Council of East Orange, at their Council Room in the City Hall, on Main Street, on the 26th day of March, 1906, at eight o'clock P. M., for the following material and labor at White Oak Ridge Pumping Station:

Furnishing and erecting one 12-inch Centrifugal Pump connected direct to one 45-HP. Electric Motor.

Furnishing and erecting 4,700 feet of pole and wire transmission line between the main pumping station and sub-station.

Furnishing and erecting air pump, vacuum chamber, gages, switchboard, electric instruments, etc.

The above proposal must be endorsed "Proposal for Centrifugal Pump and Electrical Machinery, East Orange Water-Works."

Sealed proposals will also be received at the same time and place for the following material and labor at White Oak Ridge Pumping Station:

Subdivision A.

Furnishing 474 tons of cast-iron pipe,
8 tons of bell and spigot specials, and
5 tons of flanged specials.

Subdivision B.

Laying 2,450 feet of 24-inch cast-iron pipe,
2,480 feet of 20-inch cast-iron pipe,
300 feet of 12-inch cast-iron pipe.

Building an overflow chamber and manhole, and setting blowoff.

Connecting up driven wells and building sub-station building.

Proposals for Subdivision A must be endorsed "Proposal for Furnishing Cast-Iron Pipe," and proposals for Subdivision B must be endorsed "Proposal for Laying Cast-Iron Pipe and Connecting Wells."

Specifications and plans may be seen at the Office of C. C. Vermeule, Engineer in Charge, 203 Broadway, New York, or at the office of the Water Department, City Hall, East Orange, New Jersey.

Proposals must be addressed to Edgar Williams, City Clerk, and delivered to him not later than 8 o'clock p. m. on March 26th, 1906.

The City Council reserves the right to accept or reject any or all bids.

EDGAR WILLIAMS,
City Clerk.

Dated March 2d, 1906. 10-3t

GRAVITY YARD.

Peoria, Ill.

Bids are asked until noon, March 30, 1906, by the Peoria & Pekin Union Ry. Co., Peoria, Ill., for the construction of a gravity yard in East Peoria, containing 23 miles of tracks, involving about 140,000 cu. yds. of excavation and 2,000 cu. yds. of concrete. Plans and specifications can be seen at the office of STANLEY MILLARD, Ch. Engr., Room 31 Union Station, Peoria, Ill. 10-1t

DEPARTMENT OF THE INTERIOR, Washington, D. C., March 1, 1906.—Sealed proposals will be received at the office of the United States Reclamation Service, Carlsbad, New Mexico, until 2 o'clock p. m., April 12, 1906, for the construction of a dam in Pecos River, involving the placing of 75,000 cubic yards of earth, 40,000 cubic yards of rock fill, 12,000 linear feet of steel sheet piling, 3,300 cubic yards of rubble concrete, and the furnishing and placing of about 219,000 pounds of steel, in connection with the Carlsbad Project, New Mexico. Specifications, forms of proposal and plans may be obtained from the Chief Engineer of the Reclamation Service, Washington, D. C., or from the Supervising Engineer, Carlsbad, New Mexico. E. A. HITCHCOCK, Secretary. 10-4t

PROPOSALS FOR TWO SNAGBOATS.—U. S. Engineer Office, Vicksburg, Miss., Jan. 8, 1906.—Sealed proposals, in triplicate, for construction and delivery of two steel snagboats will be received here until 12 noon, standard time, March 10, 1906, and then publicly opened. Information furnished on application. G. M. HOFFMAN, Capt., Engrs. 10-1t

U. S. ENGINEER OFFICE, 22d and K Sts., N. W., Washington, D. C., March 5, 1906.—Sealed proposals for dredging in Breton Bay, Md., and in Mattaponi and Pamunkey Rivers, and Occoquan and Carters Creeks, Va., will be received here until 12 m., April 4, 1906, and then publicly opened. Information on application. SPENCER COSBY, Capt., Engrs. 10-4t

U. S. ENGINEER OFFICE, 3232 Prytania St., New Orleans, La., February 28, 1906.—Sealed proposals for dredging channels at the mouth and inner pass of Calcasieu River, La., and for rebuilding rock revetment, will be received here until 11.30 A. M. March 28, 1906, and then publicly opened. Information furnished on application to this office. J. F. McINDOE, Capt. Engrs. 9-4t

OFFICE CALIFORNIA DEBRIS COMMISSION, Flood Building, San Francisco, Cal., Feb. 28, 1906.—Sealed proposals for constructing spillway and placing large rock at Barrier, Yuba River, Cal., will be received here until 12 noon, March 30, 1906, and then publicly opened. Information furnished on application. WM. W. HARTS, Capt., Engrs., Secy. 9-4t

PROPOSALS

WATER-WORKS AND SEWERS.

Franklin, Va., Feb. 28, 1906.

Sealed proposals will be received until one P. M., Tuesday, March 27, 1906, for the construction of water-works and sewerage system for the Town of Franklin, Va.

About 350 tons of cast-iron pipe and specials, tower and tank, steam pump and connections, 55 double nozzle fire hydrants, valves and boxes, pipe laying, digging and backfilling.

About 20,000 ft. of 6-in., 8-in., 10-in., 12-in. and 15-in. salt glazed sewer pipe; 24 ft. of 16-in., 60 ft. of 12-in. and 12 ft. of 10-in. cast-iron pipe. About 600 Y branches and tees; 30 manholes; 12 flush tanks; 30 lamp holes; 6 hose flush openings.

Send sealed bids to W. T. Pace, marked on outside "Proposals." A certified check for $250.00 must be sent with each bid. Plans and specifications will be ready on the 12th.

Specifications sent on application to the Engineer.

Town Council reserves the right to reject any or all bids.

CHAS. S. YORK,
Consulting Engineer,
1526 E. Biddle St., Baltimore, Md.
9-2t 12-1t

WATER-WORKS.

Glendive, Mont.

Notice is hereby given, That; Sealed proposals for the construction of a water-works system will be received by the City Clerk of the City of Glendive, Montana, until 10 o'clock A. M., of the 19th day of March A. D. 1906, at which time they will be publicly opened and read.

The work will comprise six different portions, as follows:

1st: The furnishing of wood or cast-iron water pipe and special castings for the pipe system.
2d: The furnishing of fire hydrants.
3d: The furnishing of valves and valve boxes.
4th: The pipe laying.
5th: A steam pumping plant.
6th: A 300,000-gal. reinforced concrete reservoir and two 200,000-gal. reinforced concrete settling basins.

Bids will be received for any one or more of the above portions, and the right is reserved to let the work in separate contract as above divided or in one or more contracts as the Common Council may determine, and to reject any and all bids.

A certified check made payable unconditionally to the order of the City Treasurer of Glendive must accompany each bid and must be in an amount equal to 5 per cent. of the amount of the bid.

All bids must be made on blank forms furnished for that purpose.

Plans and specifications and blank forms of proposal may be obtained at the office of the City Clerk and at the office of Loweth & Wolff, Consulting Engineers, First National Bank Building, St. Paul, Minn.

Dated at Glendive, Montana, this 20th day of February A. D. 1906.

By order of the City Council of Glendive, Montana.

(SEAL) HANS J. HALVORSEN,
9-3t City Clerk.

LAYING CAST-IRON PIPE.

Cincinnati, O.

Sealed proposals will be received at the office of the Board of Trustees, "Commissioners of Water-Works," of the City of Cincinnati, O., until 12 o'clock noon of Friday, March 23d, 1906, for the laying of two sections of cast-iron pipe.

The aggregate length of the two sections of the main to be laid is about 11,930 lineal feet of 60-inch cast-iron pipes.

Plans and profiles of the work and copies of the specifications, estimated quantities of the work to be done, form of proposal, forms of bonds, and form of contract, can be secured at the office of the Chief Engineer of the Board of Trustees, "Commissioners of Water-Works."

The bids shall be accompanied with bonds, certified checks, bank certificates of deposit or cash in the sum of $6,000.00 and $5,000.00, respectively, for the acceptance of the contracts, if awarded by the Board of Trustees, "Commissioners of Water-Works."

Bidders must furnish satisfactory evidence of their ability to do the class of work required.

AUG. HERRMANN,
President.
ELMER G. PRIOR,
Acting Clerk. 9-3t

STREET PAVING AND STORM WATER SEWERS.

Spartanburg, S. C.

Sealed proposals, addressed to the City Council, care the City Clerk, Spartanburg, S. C., will be received until 4 o'clock P. M., March 26th, 1906, for furnishing material and labor for paving East Main Street from Liberty Street to Fairview Avenue, North Church Street from Kennedy Place to Cleveland Street, South Church Street from Broad Street to Hampton Avenue, and Walnut Street from Magnolia Street to North Church Street, with Vitrified Brick, Bitulithic or Bituminous Macadam, or Asphalt Block. The surface to be covered is approximately 55,000 square yards. The material to be used will be selected by the City Council after bids are opened.

Sealed proposals will also be received at the above time for furnishing material and labor to construct approximately 50 catch basins, and approximately 12,000 feet of storm sewers.

Plans and specifications may be had by applying to the office of the City Engineer after March 10th, 1906. When requesting specifications bidders will state the kind of pavement they will submit bids for. A certified check for One Thousand ($1,000) Dollars must be deposited with each proposal.

The City Council reserves the right to reject any and all bids.

FRED L. BRYANT,
9-2t City Engineer.
Spartanburg, S. C., February 24th, 1906.

WANTED to let the LAYING OF ABOUT 3,000,000 BRICK and a large amount of terra cotta. Work can start at once. Work is located at Utica, N. Y. Apply

CONNERS BROS. CONSTRUCTION CO.,
9-1t Lowell, Mass.

U. S. ENGINEER OFFICE, New London, Conn., March 1, 1906. Sealed proposals in triplicate for dredging in Thames River, Conn., will be received here until 12 o'clock, noon, March 31, 1906, and then publicly opened. Information furnished on application. C. F. POWELL, Lt. Col., Engrs. 9-4t

OPEN INTERMITTENT SAND FILTERS.

Springfield, Mass.

Sealed proposals will be received until noon, March 19th, 1906, at the office of the Board of Water Commissioners, for work in connection with the construction of four open intermittent sand filters. Plans may be seen, and copies of the contract and specifications obtained, at the office of E. E. Lochridge, Engineer Water Department, 43 Bridge St., Springfield, Mass., or at the office of Hazen & Whipple, Consulting Engineers, St. Paul Building, New York City.

The work to be done is approximately as follows:

Excavating and placing 40,000 cubic yards of filter sand and earth work.
350 cubic yards of concrete masonry.
Laying 12,750 lineal feet of lateral drains.

Each bid must be accompanied by a certified check for $500, payable to the order of the Board of Water Commissioners.

The right is reserved to reject any and all bids.

E. E. STONE,
C. H. BENNETT,
FRANCKE W. DICKINSON,
Board of Water Commissioners,
9-3t Springfield, Massachusetts.

Plans and specifications may be seen at New York office of Engineering News, 220 Broadway.

WATER-WORKS — ELECTRIC PLANT.

Marlow, Ind. T.

Sealed bids will be received and opened by the Mayor of Marlow, Ind. T., Mr. W. B. Anthony, March 21st, 1906, for the material needed in the construction of a water and light system for said town. There will be required boilers, pumps, engine, A. C. generator, switchboard, cast-iron pipe, standpipe, valves and hydrants.

Specifications can be had by addressing the O'Neil Engineering Co., Dallas, Texas.

Bids will be received for material only—money is in the city treasury to pay for material purchased. The right is reserved to reject any and all bids. 9-2t

NOW READY.

Modern Tunnel Practice

Illustrated by Examples Taken from Actual Recent Work

By DAVID McNEELY STAUFFER
M. Am. Soc. C. E.; M. Inst. C. E.
Vice-President Engineering News Publishing Co.

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THE ENGINEERING NEWS PUBLISHING COMPANY
220 Broadway, New York

DEPARTMENT OF THE INTERIOR. Washington, D. C., February 9, 1906.—Sealed proposals will be received at the office of the United States Reclamation Service, Union Trust Building, Los Angeles, Cal., until 10 o'clock a. m., March 16, 1906, furnishing from 8,000 to 10,000 barrels of Portland cement. Particulars may be obtained by application to the Reclamation Service, Washington, D. C., Los Angeles, Cal., Klamath Falls, Oregon. E. A. HITCHCOCK, Secretary. 7-4t

Situations Open

WANTED.—Civil engineers and draftsmen on street railway and special work. Men with technical school education required. State age, experience and salary wanted. Address PENNSYLVANIA STEEL CO., Frog & Switch Department, Steelton, Pa. 10-2t

WANTED.—Superintendent to take charge of contract for submarine blasting and dredging. Address "R. B." Engineering News, New York. 10-1t

A-1 STRUCTURAL DRAFTSMAN capable of designing, detailing and estimating. Must have good address. Excellent prospects and permanent position. Full particulars. Address "O. A. 10," Engineering News, New York. 10-1t

LARGE ELECTRICAL MANUFACTURING COMPANY wishes experienced switchboard engineers and draftsmen. Reply BOX 824, New York. 10-1t

WANTED.—Structural draftsman for detailing and checking mill building work by Company in Eastern Pennsylvania. State experience, salary and whether married or single. Address "P. B. 10," Engineering News, New York. 10-1t

WANTED.—Draftsman on water-works piping system maps; one with some knowledge of field work preferred. Position permanent. Salary $35 per month. Address AMERICAN PIPE MFG. CO., Operating Department, 112 North Broad St., Philadelphia. 10-1t

DESIGNER FOR REINFORCED CONCRETE BUILDING WORK, WITH SEVERAL YEARS' EXPERIENCE ON STRUCTURAL STEEL PREFERRED. UNIT CONCRETE STEEL FRAME COMPANY, 1413 COMMONWEALTH BLDG., PHILADELPHIA, PA. 10-1t

WANTED.—Shop foreman, experienced in structural ironwork, to assume charge of old-established business, and one willing to invest three to five thousand. Address "M. A. 10," Engineering News, New York. 10-1t

WANTED.—Transitman for city work in suburbs of New York; draftsman preferred; experience requisite. Address "L. A. 10," Engineering News, New York. 10-1t

TWO CLERKS WANTED in the office of New York City Engineering Corporation, at a salary of $50 per month. Young men preferred who have begun a technical course. Address "X. B. 8," Engineering News, New York. 10-1t

WANTED.—Several structural draftsmen. MINNEAPOLIS STEEL & MACHY CO., Minneapolis, Minn. 10-3t

WANTED.—Graduate surveyor, experienced in accurate property surveys, mapping and computations. Steady work for reliable man. Address "S. B. 10," Engineering News, New York. 10-1t

FOR SALE

FOR SALE

AIR FURNACE

50-ton patent Wellman Rolling Furnace, suitable for Malleable Iron or Air Castings. In good order. Will be sold cheap for want of use. Address 9-2t

"E. B. 9," Engineering News, New York.

FOR SALE

QUARRY EQUIPMENT.

THOROUGHLY OVERHAULED AND IN GOOD WORKING CONDITION.

One Sullivan "Y" channeler, boiler, and bits.
Two Rand Drills, Little Giant, steam or air.
One 30-HP. Atlas engine, ball governor.
One 40-HP. Atlas boiler, return tubular.
One 80-HP. Nagle boiler, upright.
One 8 x 36-in. Cook deep well pump, steam.
One 6 x 4 x 6-in. Smith-Vaile Duplex Pump.
One Reinert Cableway, 500-ft. span, self-filling bucket, complete.
One Gardner Air Compressor, 8 x 8 x 8, with tank.
Two Boyer "B" pneumatic hammers.
One Byers hoist 6½ x 7, D. D., D. C., without boiler.
One Byers hoist, No. 52, D. D., D. C., without boiler.
One Byers hoist, No. 52, D. D., D. C., with boiler.
One Mundy hoisting engine, 7 x 10, D. D., D. C., without boiler.
One American hoisting engine, 8¼ x 10, D. D., D. C., without boiler.
Two 1-yd. Wonham-Magor all-steel side dump cars. 9-4t

WM. P. CARMICHAEL, Williamsport, Ind.